

WATERMARK

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NATIONAL FLOOD INSURANCE PROGRAM

NFIP Updated

CONTENTS

NFIP Updated
Happy Anniversary, Policyholder!
Message from the Administrator2
What is FIMA's Repetitive Loss Strategy?5
Modeling Disasters7
Reducing the Damage9
Agents, Cover Your Assets!
Lender Myths and Realities
New Apps Improves Maps14
Calculating the "Risk" of Selling Flood 15
State Stats
Appalachia21
The PRP Success Story22
CBRA Report Shows Taxpayer Savings 25
In a State of Mitigation26
NFIP Repays Loan—with Interest30
New Digital PO30
The Telephone Response Center31
Certifying Zone Determinations32
Decorate An Abe32
New Tools for Agents34
Changes to Disaster Assistance34
Claims Adjuster Presentations35
Rating With "Replacement Cost"36
FEMA Tutorials Go Online37
Re:Sources
Just Around the Bend39

The most comprehensive resource for information about the NFIP is the *Flood Insurance Manual*. Each spring and fall, the manual is updated to reflect recent adjustments to NFIP policies and procedures as well as clarifications to existing text.

Following are highlights of the Manual's latest changes, effective October I, 2002. You can access the *Flood Insurance Manual* and the revision pages online at www.fema.gov/nfip/manual.htm or you can order a hard copy of the manual by calling 800-358-9616.

Community Participation

In October 2002, text was inserted into the *Flood Insurance Manual* to spell out the process communities follow in determining whether or not to join the NFIP as well as the ramifications of non-participation in the Program.

continued on page 3

Happy Anniversary, Policyholder!

Dan Sullivan, FIMA

People tend to forget how bad a flood disaster really was. Psychologists have been telling us this for years. Bad memories tend to fade with time, especially if people dodged a bullet the first time. Many feel that flooding is like lightning: it only strikes once.

It's only human nature for people to take an approach that allows them to move on with their lives once the storm has passed.

But there are some people who must worry. It's the job of insurance agents and emergency managers to worry about others, to remind people of the risks they face, and to help them take steps to protect themselves.

Insurance agents and emergency managers have to be teachers and, to a certain degree, preachers. Much of the work of insurance agents and emergency managers is about education and persuasion: letting people know what their risks are, constantly reminding them of those dangers, and motivating them to act in sensible ways.

A valuable tool for "teaching" and "preaching" flood protection is to use the anniversary of a big flood event to remind people about flooding disasters in the past and flooding potential in the future. Focusing on the anniversary of local flooding is a particularly good approach to marketing

Message from the Administrator



Dear Watermark Reader,

Because this is my first Watermark "message" to the NFIP community, I'd like to share what I see as the job of Administrator of FIMA and a little about some of my goals for the future.

I believe that FIMA—with our emphasis on the link between hazard mitigation and flood insurance—is the cornerstone of emergency management. But emergency management is not just about flood insurance, and it's not just about flood mitigation. It is

about our future as a nation, using what we've done here at the NFIP over these last 35 years to build a stronger and safer future for Americans. It's a matter of making people safer from all hazards—natural and man-made, including terrorism. It's my hope, and that of the Bush Administration, that FEMA, in its entirety, will become the centerpiece of the proposed Department of Homeland Security.

What will be my focus as FIMA Administrator in the near future? Several of my goals are flood insurance policy growth, policy retention, and addressing repetitive flood loss properties. My article on page 5 addresses the latter.

More broadly, we plan to focus on multihazard identification and risk assessment as the starting point for determining vulnerabilities and setting priorities in the development of mitigation strategies to remove the risk or reduce the impact of all hazards. When all else fails, as can happen in disaster response, we will work with all of FEMA to help Americans recover from disasters.

We will continue the good work of FEMA's Multihazard Mapping Initiative. Knowing the historical overlap of disastrous events—such as floods, hurricanes, earthquakes, wild fires, severe winds, and man-made disasters like the terrorist attacks on September 11, 2001—is key to avoiding and dealing with the multiple hazards that affect our nation. These multiple hazards are both natural and man-made, and we need to address them broadly, whether by establishing evacuation plans or developing land-use zoning maps. So much of what we do in hazard identification can be used for security—be it ensuring the security of our nation's dams, elevating home utilities out of harm's way, or developing multihazard maps.

These are just a few of the issues FIMA plans to focus on in the next few years. But, really, it is just a matter of doing our jobs: keeping people and property secure from all hazards in an integrated risk management approach. So, as Administrator of FIMA, I will continue to do what FEMA, FIMA, and the NFIP have been doing all these years—advancing a comprehensive approach to emergency management to keep Americans safe.

Sincerely,

Anthony S. Lowe Administrator

Federal Insurance and Mitigation Administration



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Editor

Susan Bernstein

Writer

Lynd Morris

Graphic Design

Susan Hines

We welcome your comments and suggestions, as well as submissions for articles and departments. In addition, we encourage you to reproduce articles and departments contained in the *Watermark* and include them in your own newsletters or other communications. Send your questions, comments, suggestions, and submissions to:

Susan Bernstein FEMA/FIMA Room 441 500 C Street SW Washington, DC 20472

Members of Congress, please write to:

FEMA
Office of Congressional Affairs
Room 820
500 C Street SW
Washington, DC 20472

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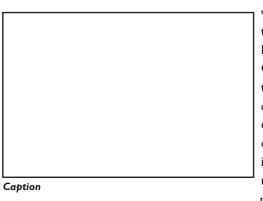
www.fema.gov/nfip/wm.htm

"When FEMA provides a non-participating community with a Flood Hazard Boundary Map (FHBM) or Flood Insurance Rate Map (FIRM) delineating its flood-prone areas, the community is allowed I year in which to join the NFIP. If the community chooses not to participate in the NFIP, flood insurance is not available to its residents."

Correctly Rating Manufactured Homes

The Flood Insurance Manual defines insurability requirements for travel trailers, manufactured (mobile) homes, and doublewide manufactured homes (see the General Rules section, pages 2-3). Even the sturdiest manufactured homes are not as flood resistant as traditionally constructed buildings. To reflect their higher risk of damage, NFIP rating tables provide manufactured homes with their own rate lines and

columns (see the Rating section, pages 2-4, 6, and 9-10, on which lines and columns of data have been included specifically for manufactured homes).



Although manufactured homes have their own rates distinctly listed in the manual's rating tables, they frequently have been misrated using single-family home rates. In only one instance does the NFIP allow a manufactured home to be classified as a single-family home—and that is not for rating purposes. It is only for the purposes of determining replacement

cost eligibility under the Special Loss Settlement provisions of the Standard Flood Insurance Policy (as long as the manufactured home is on a foundation and meets the minimum size requirements of 16 feet wide with an area within its perimeter walls of at least 600 square feet). This makes the distinction between a doublewide and a "singlewide" manufactured home and the loss settlement provisions that will apply when there is a claim.

New text has been inserted into the Application section of the Flood Insurance Manual to highlight the fact that manufactured homes, regardless of size, must not be rated as single-family homes, but must be rated according to the "Manufactured (Mobile) Home" figures in the rating tables.

Replacement Cost Ratio

In October 2002, several words

were added to
the Rating and
Lowest Flood
Guide sections of
the Flood Insurance Manual to
clarify the procedure for calculating the
replacement cost
ratio of Post-'81

V-Zone risks (see RATE 19-24 and 29-30 and LFG 1-2, 39-40, 43-44, and 51-52). An article on page 36 of this *Watermark* explains how to correctly calculate the replacement cost of a property.

CBRS on the Web

To minimize development along fragile coastal wetlands, Congress

passed the Coastal Barrier Resources Act (CBRA) in 1982, prohibiting most new federal financial assistance—including flood insurance—within a designated Coastal Barrier Resources System (CBRS) area.

A section devoted to the CBRS was added to the FEMA web site to provide visitors with details about the CBRS. Now, those NFIP stakeholders who access the *Flood Insurance Manual* on the Internet will discover that a hyperlink to the CBRS home page has been imbedded in the October 2002 revisions to the manual.

Repetitive Loss Properties

Repetitively flooded properties account for approximately 33 percent of all NFIP claims payments. On page 5 of this Watermark you'll find an article written by FIMA Administrator Anthony Lowe that provides an in-depth look at FIMA's strategy to reduce the number of repetitive loss properties. Included in the strategy is the process FIMA follows once a building has been identified as belonging on the Repetitive Loss Target Group (RLTG) list. Notification letters are sent to the policyholder and insurance agent about how to remove the building from the RLTG list.

October 2002 manual changes include updates to the RLTG notification letters. The criteria for placement of properties on the RLTG list have been added to the letters as well as more details about the process that policyholders must follow to appeal their RLTG classification or to mitigate their property and thereby have it removed from the list.

CRS Class Improvements

Twice a year, the section of the Flood Insurance Manual dedicated to the Community Rating System (CRS) is updated to show changes in classification of participating communities. In most cases, these changes include additions of new communities to the list and improvements in class—representing greater discounts in flood insurance premiums for area residents.

The tables to the right summarize the CRS October 2002 changes. The first table lists the class ratings and premium discounts of the 14 communities that joined the CRS in the last year.

The second table lists the numbers of communities that improved their class rating in the last year.

Four communities earned enough credit points to move from Class 6 to Class 5, meriting a 25 percent discount on NFIP flood insurance premiums for their residents. These communities are Roseville and Sacramento, California, and Orland Hills and South Holland,

The third table lists, by name, the seven communities whose mitigation activities warranted so many credit points that their ratings leapfrogged two or three classes, earning

significantly improved discounts for policyholders and special recognition for their mitigation efforts.

The fourth table shows the distribution of the 959 CRS communities among rating classes. Two communities—Ft. Collins, Colorado, and King County, Washington—earned

New Communities	Entering Class	Premium Discount
8	9	5%
4	8	10%
2	7	15%

Promoted Communities	Class Change	New Premium Discount
28	9 to 8	10%
25	8 to 7	15%
10	7 to 6	20%
4	6 to 5	25%

"Multi-Promoted" Communities	Class Change	Premium Discount Change
College Park, GA	8 to 6	10%-20%
Issaquah, WA	7 to 5	15%-25%
Midland, MI	9 to 6	5%-20%
Mt. Vernon, WA	8 to 6	10%-20%
Salinas, CA	9 to 7	5%-15%
Sarasota County, FL	8 to 6	10%-20%
Topsail Beach, NC	9 to 6	5%-20%

more than 3,000
CRS credit
points, securing
policyholders a
30 percent dis-
count in their
NFIP insurance
premiums. One
community—

CRS Class	Number of Communities
9	362
8	370
7	161
6	44
5	19
4	2
3	1
	959

Tulsa, Oklahoma—earned more than 3,500 CRS credit points, securing a 35 percent premium discount for policyholders.

New CRS Manual

Illinois.

The 2002 CRS Coordinator's Manual was released in September 2002. Many of the revisions to the CRS manual involved adding or renaming creditable activities. For example, the Flood Protection Library element was expanded to include web site promotion and renamed Flood Protection Information. A new Cooperating Technical Partners element was added to acknowledge the collaborative work under way as part of FEMA's map modernization efforts. And credit was increased for mitigating properties on FEMA's target list.

Several requirements were added or clarified for improving classes. For example, to receive a Class 4 rating, a community must now have an even more proactive planning and code implementation process. Communities receiving a Class I rating have an added requirement of taking a No Adverse Impact approach to floodplain management (see the Fall 2002 *Watermark*, pages 28-29).

Other CRS manual changes included adding elements to raise community regulatory standards, encourage the certification of floodplain managers, and recognize new planning and management concepts.

A summary of the major 2002 changes can be found in the Fall 2002 NFIP/CRS Update newsletter and at the beginning of the 2002 CRS Coordinator's Manual. Both are accessible at the CRS section of the FEMA web site

Happy Anniversary, Policyholder!, continued from page 1

flood insurance as one of the best steps property owners can take to protect themselves—even when the skies are clear and the breeze is light, even when they're not required to buy or renew coverage.

Clark Gristina, an insurance agent in Louisiana whose flood insurance policy growth rate has received national recognition from the NFIP, keeps a large photo of Hurricane Hugo in his office to remind customers of the danger of flooding. Displaying photos of any flood disaster, especially near its anniversary, is an effective way to jog people's memories and get them to take stock—not only of their personal and family emergency plans but also of their flood insurance needs.

Many insurance agents use renewals as an opportunity to highlight the importance of flood protection. When property owners don't want to renew their flood policies, these agents require that their customers sign an acknowledgment that they are, in fact, declining the flood coverage or deciding not to renew. This is a good procedure for highlighting the choices and risks property owners face, and it is a great safeguard for agents, since people tend to forget that they were given the choice to be covered.

FIMA has launched a flood anniversary project in conjunction with the WYO companies and the FEMA Regions.

We've identified the major flood events that have occurred in the last 10 years or so, the affected States, and the FEMA Region that works with each affected State. We've also drafted a number of sample marketing materials. One set of materials is designed to remind people near the anniversary of large flood events that now is not the time to let their guard down. Now, when their flood insurance policy is up for renewal, is the time to keep their coverage and not let it lapse. While one sample uses the devastating 2001 floods resulting from Tropical Storm Allison as a reference, it can be adapted for the anniversary of any other flood event.

These materials are available from WYO companies and the FEMA Regions, and also are posted on the FEMA web site (www.fema.gov). None of the sample materials are copyrighted; they're out there for everyone to use. So look at them, adapt them, make them better, if you prefer, but use them and get people on or near the anniversary of big flood events to do the smart thing: keep their coverage if they have a flood insurance policy or buy one if they aren't already protected.

Dan Sullivan is a Program Analyst with FIMA's Risk Communication Division. He has worked at FEMA for almost 30 years in training, response planning, and the NFIP.

Ten Years Later

The 1993 Midwest flood was one of the most significant and damaging natural disasters ever to hit the United States. Hundreds of levees failed along the Mississippi and Missouri Rivers. Thousands of people were evacuated, some for months. Fifty people died. Damages totaled \$15 billion. The flood was unusual for the magnitude and number of river and stream crests, the large area impacted, and the length of the time the flood was an issue. From May through September of 1993, major and/or record flooding occurred across North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, Missouri, Wisconsin, and Illinois.

FIMA will work with the three FEMA Regions that were affected by this damaging event 10 years ago to remind individuals to consider the benefits of preparedness, mitigation, and the purchase and retention of flood insurance.

What is FIMA's Repetitive Loss Strategy?

Anthony Lowe, FIMA

ties suffering flood losses over and over again. We've also heard the other half of that tragedy—some of the owners of those properties have filed flood insurance claims and have had those claims paid over and over again. Repetitive losses are just a small portion of the NFIP insured properties, but just those few losses have offered the news media a field day.

More importantly, repetitive flood claims impact all of us, as mitigators, as NFIP policyholders, and as property owners. The NFIP's stakeholders know first-hand the disruption to life and property that flooding can cause. Every time a homeowner has to rip up a flood-soaked carpet, it should affect us all, at least peripherally.

While insured flood losses are not paid out of taxpayer funds—they are paid with premium income in a normal loss year—FIMA is taking steps to control costs for repetitive loss properties, and to work toward reducing future flood losses for all property in our domain. The primary objective of FIMA's Repetitive Loss Properties strategy is to eliminate or reduce repeated flood damage to property and to lessen the disruption of life caused by repeated flooding of the same properties.

Repetitive Loss Strategy Defined

FIMA is looking closely at properties that have been identified as members of the Repetitive Loss Target Group. This group includes every NFIP-insured property that, since 1978 and regardless of any change(s) of ownership during that period, has experienced:

- I. four or more paid flood losses; or
- 2. two or more flood claims of \$1,000 or more in any given 10-year period; or
- 3. three or more paid losses that equal or exceed the current value of the insured property.

FIMA's aim is to transfer the approximately 11,000 repetitive loss properties' policies from private Write Your Own (WYO) insurance companies to the NFIP Servicing Agent's Special Direct Facility (SDF), where approximately 10 percent of NFIP policies are currently handled outside the WYO system. This transfer will allow FIMA to more closely monitor the claims activity on these properties through close supervision and to provide increased attention when mitigation decisions are made.

Designation and Notice

FIMA began classifying properties according to the above guidelines on July 31, 2000. In the future, we will continue to include more properties in this definition as losses occur.

Once a property is designated as a member of the Repetitive Loss Target Group, the NFIP Bureau and Statistical Agent notifies WYO companies and the NFIP Servicing Agent at least 150 days prior to the expiration date of the Standard Flood Insurance Policy. WYO companies then notify the affected policyholders and their agents 90 days before expiration of the policy. This notice from the WYO company explains that the policy is ineligible for coverage outside of the SDF. Offers to renew are issued by the SDF approximately 45 days prior to the expiration date.

In addition, once a property is designated, the appropriate FEMA Regional Office provides information about the property to state and local floodplain management officials. The FEMA Regional Office may be able to offer information about building inspections and financial incentives for undertaking measures to mitigate future flood losses to the property.

Who determines which properties are included in the target group?

State and local governments must determine which properties they wish to target for loss reduction actions. Since they are interested in addressing entire areas of their communities subject to repeated flooding, rather than individual sites, these may include both repetitive loss properties and other properties.

The Appeals Process

How does the Repetitive Loss Target Group Property designation affect the homeowner, or more importantly, what can a homeowner do if he or she disagrees with our assessment?

Policyholders who have mitigated the risk to their property or believe that their property has not sustained the loss history indicated by the NFIP have the option of appealing that designation in writing to the SDF. All documentation to substantiate the appeal must be included with the appeal. Until the appeal is settled, the policy will remain in the SDF. When the SDF is notified by FEMA of the appeal decision, a letter is sent to the agent and policyholder stating the outcome of the appeal. If the appeal is successful, the policy will be transferred back to the WYO company that previously serviced it.

Downsizing the Target Group

FEMA has specific activities set forth to reduce the number of repetitive loss properties.

Mitigation Efforts

A homeowner may use elevation, demolition, relocation, or other "floodproofing" mitigation methods that have been approved by FEMA. If the property still stands, its flood policy can then be removed from the SDF and returned to a WYO company at the next flood insurance policy renewal date since the property should no longer be at risk of flood damage.

In some cases, communities buy the property from homeowners and either move or demolish the buildings, thus returning the land to open space usage less susceptible to flood damage—community parks, for example.

I've heard about "buyouts." What does that mean?

Some at-risk properties may be acquired by a community. If so, the community must either demolish the properties or move them out of the flood hazard areas. In either case, the land will be turned over to local government, limiting its use to open space in perpetuity. When a property is "bought out" or demolished, the flood insurance policy is canceled.

Insurance Efforts

Before August 2001, more than 10,000 flood insurance policies were transferred to the SDF and set up for insurance servicing directly by the NFIP to allow better monitoring of insurance activities. This close monitoring enables us to improve the accuracy of policy information on these most at-risk policies. It also allows FIMA to more easily verify underwriting and rating information on those properties.

Listing insurance services for these properties in one place also allows FIMA to provide more useful information to state and local governments to assist in their mitigation activities. This information is made available to state and community personnel through a series of reports on FEMA's Intranet site and through FEMA Regional Offices.

The reports assist state and local governments with their planning and decision-making process as part of their long-range loss reduction efforts on properties most at risk from flooding.

Final Option

What if a policyholder with a Repetitive Loss Target Group Property refuses the buyout offer or other FEMA mitigation efforts? In the future, the policyholder may be required to pay a full-risk premium to ensure the property. It is anticipated that the full-risk premium will be considerably more than the amount previously paid. That property will continue to be covered through the SDF.

Addressing the Risk Directly

This is a battle fought on multiple fronts, with mitigation, education, and insurance. We have no qualms about this. It is the essence of how FIMA works—fix the problem, educate the public, and insure the risk. While we will continue to work with all of FEMA to help citizens recover from their losses, the best way to help Americans is to make sure that risks are addressed before the storm hits so losses are kept to a minimum and people can get back to their lives quickly and safely after a disaster. \overline{W}

Anthony Lowe became Administrator of FIMA in October 2002. Prior to joining FIMA, he was the Senior Legislative Counsel for the U.S. Senate Judiciary Subcommittee on Antitrust, Competition, and Business Rights. Lowe also worked as a Deputy Prosecutor with the King County Prosecutor's Office in Seattle, Washington.

Modeling Disasters

Claire Drury and Dorothy Andrake, FIMA

stimating the losses from disasters is essential to decision-making at all levels of government. Loss estimates provide a basis for mitigation plans and policies, emergency preparedness, and response and recovery planning.

FEMA, under contract with the National Institute of Building Sciences has developed HAZUS-MH (Hazards U.S.-Multihazard), a nationally applicable standardized methodology and software program that contains models for estimating potential losses from earthquakes, floods, and hurricanes.

To be released in early spring of 2003, HAZUS-MH will use state-of-the-art geographic information system software (ArcGIS) to map and display hazard data and the results of damage and economic loss estimates for buildings and infrastructure. It will also allow users to estimate the impacts on populations of hurricanes, floods, and earthquakes. HAZUS-MH will be fast running so that it can be used in "real time" to support response and recovery after a natural disaster.

Tailoring the Data Sets

Each hazard model will operate at Level I using national data sets that are included with the HAZUS methodology, and at Level 2 using national data modified with local data for more refined results. A Level 3 analysis will allow users to supply their own techniques to study special conditions such as dam breaks and tsunamis. Expertise in engineering and other fields is

and other fields is needed at this level. To support data collection, the HAZUS-MH InCAST inventory collection tool was released in 2002 with expanded capabilities for multihazard data collection. InCAST assists users with collecting and managing local building data for more refined analyses

than are possible with the national data sets that will come with HAZUS. HAZUS-MH will include an enhanced Building Inventory Tool to assist users in collecting local tax assessors' data for incorporation into HAZUS-MH.

Hurricanes

The HAZUS-MH Hurricane Model will allow users in the Atlantic and Gulf Coast regions of the U.S. to

estimate hurricane wind speeds, potential wind damage, and losses to residential, commercial, and industrial buildings. It will also allow users to estimate direct economic loss, post-storm shelter needs, and building and tree

debris quantities.

Floods

The HAZUS-MH Flood Model will be capable of assessing riverine and coastal flooding. It will estimate potential damages to all classes of buildings, essential facilities, transportation lifelines, and utility lifelines, vehicles, and agricultural crops. The model will address building debris generation and shelter requirements.

System Requirements

Most local governments already have the computer hardware and software needed to run HAZUS-MH. System requirements are expected to be:

- Pentium III PC @ 800 MHz or higher
- 128 MB RAM; 256 MB recommended
- 10 GB or larger hard drive
- CD-ROM drive
- Graphics card with 800x600 minimum resolution
- Mouse, keyboard & monitor
- Windows 2000 SP2 or later
- ArcGIS 8.2 (as of now)
- Spatial Analyst for use with the Flood Information Tool

Direct losses will be estimated on the basis of physical damage to structures, contents, and building interiors. The effects of flood warning will be taken into account, as will flow velocity effects. The Flood Information Tool, released in July 2002, allows users to prepare local flood hazard and other pertinent data for use in the HAZUS-MH Flood Model.



Earthquakes

The HAZUS-MH Earthquake Model, an updated version of HAZUS99, will continue to provide estimates of damage and loss to buildings, essential facilities, transportation and utility lifelines, and population based on scenario or probabilistic earthquakes. The model will address debris generation, firefollowing, casualties, and shelter requirements. Direct losses will be estimated on the basis of physical damage to structures, contents, inventory, and building interiors. The model also will include the new Advanced Engineering Building Module for single and group building mitigation analysis.

Combined Catastrophes

HAZUS-MH will be capable of multihazard analysis by providing access to the average annualized loss and probabilistic results from the hurricane, flood, and earthquake models and combining them to provide integrated multihazard reports and graphs. HAZUS-MH also will contain a third-party model integration capability that will provide access and operational capability to a wide range of natural, man-made, and technological hazard models (nuclear and conventional blast, radiological, chemical and biological) that will supplement the natural hazard loss estimation capability in HAZUS-MH.

For more information, visit the HAZUS-MH section of the FEMA web site (www.fema.gov/hazus/). **W**

Claire Drury, of FIMA's Building Sciences and Technology Branch, is the Project Officer for FEMA's HAZUS project. Dorothy Andrake of FIMA's Outreach and Partnership Branch, is FEMA's HAZUS Program Specialist.

Reducing the Damage

Plooding is costly to the property owners whose homes or businesses are damaged, to the many public and private organizations that step in to assist flood victims, and to all Americans footing the bill for the federal disaster assistance that is often needed to help flood victims recover.

Averting the danger of flood losses before the waters rise pays off in the long run. Reducing the damage that occurs as long-term mitigation projects are put into place lowers the cost of flooding in the short term.

CRS Rewards Mitigation

The Community Rating System (CRS) is one of FIMA's most successful programs. The CRS was created in the early 1990s to assist communities and their residents in avoiding or reducing flood damage by engaging in activities that exceed the minimum floodplain management ordinances required for participation in the NFIP. Communities receive two significant benefits for taking part in CRS activities: a reduction in the loss of life and damage to property due to flooding, and a reduction in annual flood insurance premiums for NFIP policyholders.

This article about flood damage reduction (CRS Series 500 activities) is the third in a series of Watermark reports about the four categories in which all CRS creditable activities are grouped. The other three CRS activity categories focus on public awareness (Series 300—see the Summer 2002 Watermark, pages 1-7), mapping and regulations (Series 400—see the Fall 2002 Watermark, pages 23-27),

and flood preparedness (Series 600—look for a report on this category of CRS activities in the next edition of Watermark). These and other issues of the Watermark newsletter are available on the NFIP web site (www.fema.gov/nfip/wm.htm) or by sending a fax to Lynd Morris at 301-918-1471 to request free copies or to be added, at no cost, to the Watermark subscription list.

Repetitive Losses

Flood damage reduction is central to FIMA's Repetitive Loss Strategy. The NFIP insures more than 4 million buildings, but fewer than 2 percent of these account for 33 percent of all flood claims paid since 1978. The few properties that make up this 2 percent have been flooded more than once; some have been flooded numerous times. Using input from NFIP stakeholders, FIMA has developed a Repetitive Loss Strategy that includes several ways to help property owners remove repetitive loss structures from the floodplain (see related article on page 5). The CRS provides extra incentives to help participating communities accomplish this.

Every year, FEMA produces a list of repetitive loss properties within each NFIP community. Properties on this list have had two or more claims of at least \$1,000 paid by the NFIP within any 10-year period since 1978. Communities interested in joining the CRS must first review and then update FEMA's local repetitive loss property (RLP) list to ensure its accuracy. In fact, to achieve a CRS Class 9 (earning a 5 percent premium reduction) or better rating, every

community with one or more RLPs must submit a worksheet containing corrections when the community applies to join the CRS. New CRS communities are placed in repetitive loss categories that determine how extensive local mitigation efforts must be to warrant RLP removal from the FEMA list.

When a community with one or more RLPs applies to the CRS, local officials submit a map that includes the location of each RLP and a short description of the cause of the repetitive flooding (such as stream flooding, sewer backup, or inadequate drainage).

To begin the process of mitigating repetitive flood losses, communities with one or more RLPs are required to implement an outreach project. Communities with 10 or more of these properties must also prepare strategic plans that address the causes of repetitive flooding.

Outreach projects are intended to advise owners of RLPs about flood risks, appropriate mitigation measures, and the basic facts about the financial protection offered by flood insurance. Outreach must go to all properties in the identified repetitive loss areas, not just to those on the FEMA list.

Activity 510: The Plan

Planning is a comprehensive,
"future-oriented" approach that
determines how a community will
deal with its flooding problems and
protect the natural and beneficial
functions of its floodplain. For this
reason, the CRS provides up to 304
credit points for creating, adopting,
and maintaining a comprehensive

floodplain management or multihazard mitigation plan. Plans are intended to guide development and coordination of activities that will best tackle a community's vulnerability while simultaneously educating community members about the hazard(s) and ways to build community support for loss reduction and prevention measures.

A floodplain management plan developed for the CRS under the new 2002 criteria also can fulfill the new all-hazards plan prerequisites for grants under FEMA's Flood Mitigation Assistance (FMA) Program, FEMA's Pre-Disaster Mitigation (PDM) Program, or FEMA's Hazard Mitigation Grant Program (HMGP) as well as the U.S. Army Corps of Engineers, planning requirement for communities applying to receive flood protection projects.

Activity 520: Moving Up or Moving Out

The surest way to protect a building from flood damages is to remove it from the floodplain. The most fre-

quent
method for
doing this is
for a government
agency to
acquire the
building and
demolish it
or move it
to high

Caption

ground. Occasionally the property owner may choose to relocate the building to high ground.

Because this activity is so effective at reducing the number of repetitive loss buildings on FEMA's list, a community can earn a maximum of 3,200

CRS points for this activity, depending on the number of buildings removed. Communities can earn even more CRS credit for purchasing and relocating an insurable building if the land is maintained as public open space under CRS Activity 420 (see page 24 of the Fall 2002 Watermark). However, CRS credit is provided only if no other building is erected on the same site, even if the new building is constructed to flood protection standards.

Activity 530: Retrofitting and Flood Control

Although acquisition and relocation of flood-prone buildings is the preferred method of flood damage reduction, many buildings can be protected effectively from shallow, slow-moving flooding without being removed from the site on which they are located. Activity 530 provides up to 2,800 CRS credit points for protecting flood-prone buildings from damage by retrofitting or other types of flood control. Extra credit can be earned if the buildings being pro-

tected are on FEMA's RLP list.

Retrofitting projects that can receive CRS credit include elevating buildings above flood levels, using either dry or wet floodproofing techniques to

safeguard buildings, and protecting basements from sewer backup.

Structural flood control projects that can earn CRS credit include installing flood barriers such as levees, berms, and floodwalls; modifying channels by enlarging bridges and cul-

verts; creating diversions for flood waters; improving storm sewers, including enclosing open channels; and building small reservoirs such as retention and detention basins.

Activity 540: Keeping the Drains Clear

A clear drainage system allows flood waters to be carried and stored more effectively. Despite floodplain regulations that prevent construction from encroaching on the local drainage systems, debris can accumulate, sediment can clog carrying channels and detention basins, and growth of vegetation can reduce the flow and storage of water.

Under Activity 540, a community can receive up to 330 CRS credit points for regularly inspecting its drainage system, removing debris, and correcting sites with drainage problems. First, the community must define its drainage system based on what needs to be maintained to prevent flood damage to buildings from small, frequent storms. In some communities the drainage system will be open channels and ditches and detention and retention basins. In a flat community—especially one protected by a levee-maintaining underground storm sewers, sewer inlets, and human-made canals may be vital to prevent flooding. In another community, streets and roadside ditches may be the important conveyors of surface water and must, therefore, be kept clean.

The CRS credits regular channel and basin inspections and debris removal, especially after storms.

Activity 540 credits the implementation of regulations against dumping into the drainage system. Regulations also must address the problem of

keeping channels clear of materials such as brush, fill, and items not normally covered in the community's littering ordinances. (Additional credit is available under CRS Series 300 public awareness activities for advising people about these regulations and the need to keep channels open and basins clear. For example, communities can post "no dumping in the stream" signs at key locations in the drainage system, such as schools and public parks.)

Under Activity 540, credit also is available for communities that undertake programs to make, permanent, structural flood reduction changes to channels or basins. These might include enlarging culvert and bridge openings to eliminate bottlenecks, installing grates to catch debris, and building new retention basins to reduce flows in existing channels. In

addition, credit is available for maintaining erosion protection programs—such as dune or mangrove preservation, bluff stabilization, and beach nourishment projects—in communities affected by coastal erosion.

A "Win-Win" Program

Receiving CRS credit and lowering policyholder premiums may simply be a matter of documenting what is already in place. Once participating in the CRS, a community needs only 500 points to move from one CRS class to the next, with a 5 percent insurance premium discount for each class improvement!

If your community is not yet part of the CRS and you'd like to help area property owners reduce their flood insurance premiums, an ISO/CRS Specialist can help you apply to the program and design, implement, and document the activities that earn premium discounts. To get started, contact the Insurance Services Office by telephone (317-848-2898) or by e-mail (nfipcrs@iso.com).

If you'd like more information about the CRS Series 500 activities, visit the CRS section of FEMA's web site (www.fema.gov/nfip/crs.htm) to access the full text of the CRS Coordinator's Manual or to read any of the specialized CRS publications available online. Among these is CRS Credit for Drainage System Maintenance, which also can be ordered at no cost by calling 317-848-2898 or faxing your request to 317-848-3578.

Watch for the final report in this series about the CRS—Series 600: Flood Preparedness—in the next Watermark! [W]

Agents, Cover Your Assets!

Susan Bernstein, FIMA

ver the years, a considerable amount of misinformation has reached the public about the NFIP. Sometimes this misinformation has arrived in the form of big stuff like national news items that don't reflect the reality of the nation's flood program. But more often, incorrect information about the NFIP comes to the public from an insurance agent who may not fully understand flood insurance.

The big stuff is addressed by FIMA Administrator Anthony Lowe in his article on page 5 about FIMA's Repetitive Loss Strategy. I'd like to address the "little stuff"—the some-

times minor misunderstandings about the NFIP—that can become a headache for agents and homeowners alike. Those of us at FIMA see a clear, two-way communication process with you—our stakeholders—as essential. After all, you are the public's main contact with the NFIP. You need to know the product. Consumers look to their agents to advise them about their insurance needs, and consumers deserve agents who know the products they sell.

Here are three of the most effective ways to protect your clients from flood losses— and yourself from flood-related litigation.

The Bottom Line: Offer Coverage

A recent Texas Circuit Court of Appeals decision to return a flood insurance case to a lower court involved a claim in which an insurance agent was sued for negligence for discouraging inquiries about NFIP flood insurance from a long-time homeowners policyholder. The policyholder's home flooded, and a suit was filed. While a determination has still not been made in the lower court, this is clearly a situation to avoid. It can't be said enough—know what you are selling or refer your policyholders to someone who does.

Yes, there are agents out there who actually turn away flood business, and those agents don't just miss out on a policy here and there. They also risk getting sued.

Understand the NFIP Term "Special Flood Hazard Area"

Many of our readers may remember the spring floods of 1997. That was the year the Red River of the North flooded most of downtown Grand Forks, North Dakota, damaging or destroying hundreds of homes and businesses. Most of us have heard stories about insurance agents who told their clients in the months before the flooding began that they did not need flood insurance. Why not? Because their clients did not live in a Special Flood Hazard Area (SFHA).

The SFHA has been referred to as the "100-year floodplain." This unfortunate term has had the effect of oversimplifying flood risk and has led to a widespread basic misunderstanding about the likelihood of flooding. Of course, floods don't always wait 100 years to hit hard again. Thousands of flood victims have discovered to their detriment that floods can happen a year later or even a month later. A property in an SFHA is always at risk, and should always be insured through the NFIP against floods.

Equally as important—just because a property is located outside the SFHA it doesn't mean the risk is gone. While homes and businesses located in the SFHA are at greatest risk of flood damage, the risk doesn't stop at a line on the map; it just lessens as you move away from the SFHA. Remember, homes outside

that zone are also at risk of flooding. Approximately 25 percent of the NFIP's claims actually come from outside the SFHA.

Understand the NFIP Term "Participating Communities"

Another area of misunderstanding among insurance agents is whether or not a community participates in the NFIP and whether or not property owners can get flood insurance if the community participates.

Does the community participate in the NFIP? This is an easy one. First, remember that "community" refers to the political entity that

has the authority to adopt and enforce floodplain ordinances for the area under its jurisdiction. Next, visit the Community Status section of FEMA's web site (www.fema.gov/fema/csb.shtm), click on your state, and then locate your customer's community by name. You'll be able to learn whether or not your community participates in the NFIP, and if it does, you'll have access to various kinds of NFIP community information, from the date of the most recent flood map to the community's identification number.

Can a building owner get flood insurance if the community participates? This is the easiest question of all—of course! Those who want to learn more about helping their com-

munity join the NFIP should contact the nearest FEMA Regional office for assistance in the process. FEMA Regional Office contact information is listed on the detachable flap on the back cover.

The Right Stuff

If you know the "ins-and-outs" of what you are selling, you're just one step closer to a good sale. As an insurance agent, you have a special role in the eyes of your insured—

you are an advisor as well as a neighbor. You owe it to your clients to be knowledgeable about the NFIP and flood risk in general.

NFIP Online Training for Agents

Visit these two web sites for online training about the NFIP:

http://www.fema.gov/nfip/trainagt.htm http://training.nfipstat.com/portal/default.htm

Visit the web site of the Association of State Floodplain Managers for information about your state's NFIP programs:

http://www.floods.org/stcoor.htm

Watermark can help; every issue includes "Just Around the Bend," a list of upcoming NFIP-related training events, including Agent Workshops, held across the United States. In addition, the NFIP web site can link you to various online training opportunities. W

Susan Bernstein is an attorney working for FIMA, handling issues related to WYO litigation for nearly 6 years. She is the Watermark Editor and Legal Liaison for the NFIP.

Lender Myths and Realities

Myth: Buildings outside the Special Flood Hazard Area do not need flood insurance.

Reality: All areas are susceptible to flooding, although to varying degrees. In fact, 25 percent of all flood claims occur in the low- to moderate-risk areas. There's a big difference between having to buy flood insurance because the law says you must and choosing to buy flood coverage because it's in your best interests to do so. The NFIP recommends that all property owners purchase and keep flood insurance because it is the best means of recovery from flood damage.

Myth: If homeowners with a mortgage don't have flood insurance, they can always get a FEMA disaster assistance grant.

Reality: Unfortunately, some property owners still rely on federal disaster assistance for recovery from flooding events, a strategy fraught with pitfalls. If a flooding event is not a federally declared disaster, no federal disaster assistance is made available. Even when a Presidential disaster is declared, the amount of a FEMA disaster assistance grant is nominal and you have to qualify. Most of the assistance to victims comes in the form of low-interest loans from the U.S. Small Business Administration, loans that must be paid back with interest. As a lender, you need to consider your customers' ability to pay back an additional loan. As property owners, your clients should consider whether they have the financial ability to absorb uncovered flood losses if they don't have insurance to cover those losses. In addition to being a more practical financial approach than expecting disaster relief, flood insurance enables faster recovery with less disruption of the normal family life.

Myth: It's not a lender's job to help minimize costs relating to flooding.

Reality: Lenders, it's your collateral interest—insure it. Most properties have flooding risks to different degrees. It's simply a practical move to protect your financial investments. By doing so, you also protect the homeowner's investment—and to them, it's not just an investment, it's their home.

Myth: Homeowners don't need to know everything about flood insurance when they take out their loan. They probably wouldn't understand it anyway.

Reality: An educated consumer is your best customer. As a lender, you should ensure that pertinent flood risk information is disclosed early in the home purchase process, so that buyers can make informed decisions concerning properties being purchased. For instance, a lender may view the purchase of waterfront property as a recreational opportunity, but to homeowners this same purchase may be viewed very differently—as a home, as a refuge, and as their future financial security.

Myth: A lender doesn't need to "bother" the borrower with small concerns like the potential of mandatory purchase of flood insurance when buying a home.

Reality: When property owners learn late in the mortgage closing process that their lender is compelling them to purchase flood insurance, a requirement by law, homeowners may not understand that this requirement is for the life of the loan. Thus, they may drop flood insurance coverage after the first year. Freedom-loving Americans naturally resist any requirement that they do not understand and that they feel is being forced on them. Indeed, an unexpected flood insurance premium can seem like a surprise attack and you don't want the borrower considering you, the lender, as the enemy-work with your borrowers.

Myth: I don't need to arrange for escrow of flood insurance premiums.

Reality: If financial institutions and their servicers require the escrow of taxes, insurance premiums, or any other fees or charges for covered loans, they must also escrow for premiums and fees for flood insurance. Insurance premiums are much easier for borrowers to include in their budgets when escrowed monthly rather than when paying the annual premiums in full at renewal time. W

New Apps Improve Maps

Anne Flowers and Scott McAfee, FIMA

ap modernization continues to be a high priority at FEMA. One of the objectives of FEMA's Map Modernization Plan is to automate the NFIP flood map production process more effectively. Using geographic information system (GIS) and computer-aided design (CAD) applications and software packages should help FEMA meet its goal of reducing the amount of time traditionally associated with the updating of flood maps. These applications and software packages allow for easier computer model setup, data processing tasks, and actual data output moving toward the goal of enhancing flood hazard mapping and Flood Insurance Study products.

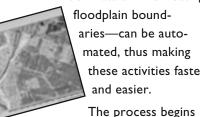
The use of automated hydrology and hydraulics packages for flood hazard mapping is increasing in the NFIP due to decreasing costs associated with obtaining digital topography; the increasing availability of water resources engineering tools; and the rising number of GIS applications developed by local communities. For example, Missouri and Nebraska are embarking on these kinds of mapping projects to identify and delineate flood-prone areas in their respective states. These activities are largely automated and include digital elevation modeling, peak discharge flow calculations, and delineation of 100-year flood elevations.

Hydrologic modeling is used to estimate how water will cycle through a given watershed. For instance, an engineer would need to know the peak flood flows at significant locations within a watershed,

and then use this data for mapping activities. Once the input parameters have been determined, the engineer can use GIS or CAD to digitally manipulate and manage the map layers produced. By displaying the resulting output in a GIS or CAD environment, time- consuming tasks-such as extracting cross sec-

> tion data and delineating aries-can be automated, thus making these activities faster and easier.

> > with an inventory of existing flood stage data. Information is identified, collected.



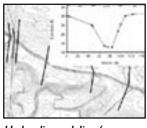
Example of a map product that could be digitally distributed with GIS data layers

> and compiled from known sources. This data would include 100-year discharges, 100-year flood elevations, and 100-year flood stages for established locations along a flooding source. Representative cross sections are selected at these locations throughout the watershed to capture the stream and watershed characteristics.

The next step is to develop depth data for all stream reaches. Larger

streams are digitized to match digital elevation contours.

Station

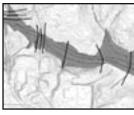


Hydraulic modeling (cross sections from digital terrain)

and elevation data are calculated at each cross section, and flood depths are calculated using the I percent

probability discharge, the channel cross section, and the channel slope. The calculated flood depths then can be used to delineate the 100-year floodplain. The program will create coverage representing the area of land below the elevation of the established 100-year flood. This area is called the flood-prone area.

The final step in the process is quality control. It is in this step that



Automated floodplain mapping (3-D floodplain delineation with digital terrain, stream lines, and cross sections)

any inconsistencies between the flood-prone area delineation and the calculated flood depths will be identified and cor-

rected. The digital contour information in combination with the flood depths provides an easy way to assess the accuracy of the delineation. The floodplain coverage will be cross-referenced and edited to ensure that the delineation conforms to the calculated flood depths and the digital contours.

The final product will be depicted on working maps for submission to FEMA and will represent the approximate A Zones on future FEMA Flood Insurance Rate Maps. W

Anne Flowers has worked in the NFIP's floodplain mapping program for 26 years. She is currently working with FIMA's Hazards Mapping Division. Scott McAfee works in the Hazard Study Branch of FEMA's Hazards Mapping Division. He is FIMA's GIS Coordinator and is a member of the Federal Geographic Data Committee's Coordination Group.

Calculating the "Risk" of Selling Flood

Judy Marvel, NFIP Bureau and Statistical Agent

an you afford the "risk" of not selling flood insurance? The correct answer is no! And here's the number-one reason: flood insurance is profitable!

Look at your current book of business. I'll bet that there are many homeowner and business packages in your files that do not have a flood insurance companion. Why is that? Perhaps it's lack of enthusiasm for the product? It's too hard a sell? Or maybe you believe that your clients don't need it? Agency veterans across the United States will tell you that, once you see what the flood policy covers and once you become NFIP savvy, you'll recognize that every client who buys homeowner or business coverage needs flood insurance, too.

Did you know that, to file a flood claim, only one of two conditions must exist? To constitute a general condition of flooding, either a twoacre area of normally dry land must be inundated with water, or at least two adjoining properties (one of which belongs to the insured) must have been flooded. Is there a condition that says that the water has to be tidal or caused by a storm? No indeed! In fact, a broken water main that floods both the street and a business will constitute a general condition of flooding since two adjacent properties were flooded.

Did you know that 25 percent of all NFIP claims paid are for properties located in low- and moderaterisk areas? That's right! A quarter of all flood claims paid are for properties in B, C, and X zones. How many clients have you told that there is no

need for flood insurance because their property is not located in a high-risk area? How many times did you not offer the coverage for the same reason? Rethink your decision not to sell. It could save your agency the second top reason for selling flood insurance: Errors and Omissions!

The biggest obstacle in selling any product is disbelief in the product. You can't sell something you don't believe in. So, the first step in your plan to market flood insurance should be education. Call your NFIP Regional Office (contact information is on this Watermark's back cover flap) or WYO company and request training for your agency. Attend one of the NFIP's agency workshops, or go to the NFIP web site (www.fema.gov/nfip) for online training opportunities.

Do you have questions about policy coverage? Again, call your NFIP Regional Office and request a workshop schedule (see the Agent workshop schedule listed in "Just Around the Bend" on page 39 and the Claims Adjuster workshop schedule listed on page 35). Better yet, if you want to put your agency name out in front, sponsor a community town hall meeting where NFIP coverages can be reviewed, and myths and facts about the program can be discussed in an open forum. There are many learning opportunities available to you. Take advantage of them.

When making your decision to sell flood insurance, you might want to take into consideration the following questions:

- I. What's the exposure for flooding in my state?
- 2. Where should I concentrate my sales?
- 3. What's already insured out there?
- 4. What's my commission potential?
- 5. What's my overhead cost?

Let's look at each of these questions in more detail.

What's the exposure for flooding in my state?

Following this article is a table showing the number of NFIP policies located in Special Flood Hazard Areas (SFHAs) and in B, C, and X zones in your state. Remember my earlier statement that a quarter of all flood claims paid are for properties in B, C, and X zones? Also, remember that the NFIP's lower-cost Preferred Risk Policy is an ideal sale in these areas, if the underwriting guidelines are met.

SFHAs are at high risk of flooding. Chances are that these property owners are well aware of the risk and will be anxious to buy the coverage. For those property owners who have federally backed loans, it is mandatory that they purchase the coverage. Your job as an agent is to work with owners of property in SFHAs to promote the very real need for contents coverage to supplement the mandatory building coverage. The agent would do well to read the Standard Flood Insurance Policy to find out what items are considered building property and what items are considered contents property. For example, a carpet that

has been permanently installed over unfinished flooring is considered a building item, but a carpet placed over finished flooring is considered a contents item. Also, don't overlook the need for condominium unit owners to purchase building and contents coverage (that includes loss assessment coverage too) and for tenants to purchase contents coverage. Did you know that any built-in improvements that a tenant makes could be covered under the Dwelling Form policy? Read the policy!

Where should I concentrate my sales, and what's already insured out there?

When you are trying to decide what segment of the flood market has not been developed, you'll want to see what type of flood policies already exist in your area.

Examine the section of the following table that lists the number of each type of insured building-condos, commercial, and residential—in each state and the policies in force (these represent the number of contracts) for those types of buildings. Now take a look around your community. Where's the greatest potential for sales? You may want to concentrate your advertising on commercial sales if your area has a high concentration of commercial properties. But remember-offer flood insurance to all of your clients, residential or commercial!

Here's another marketing tip.

Advertise to those property owners who have let their flood insurance policies lapse. After a loss, the insured may not think it necessary to renew the policy, reasoning that

"lightning won't strike twice in the same place." Ask the property owners of Louisiana, Florida, North Carolina, and Texas about this theory. Flood-prone properties are susceptible to flooding over and over again! Go after the "forgotten book of business." In the meantime, keep track of your flood business. Don't let it become ancient history!

Depending on the lending institutions to keep flood insurance in effect is not a good idea. Once the loan is satisfied, lenders may not choose to require the retention of flood coverage. Also, an escrowed renewal premium may be overlooked. Make certain that a process is in place to monitor renewals. Be certain that the policy reflects current lender information. Mortgagees and other interested parties will want to know if the policy has lapsed. The NFIP automatically sends expiration notices to loan servicers and other interested parties 45 days prior to expiration of the current policy term. Should a policy lapse, notify the insured. Ask your client if the premium payment was overlooked, and then provide the information needed to keep the policy active.

What's my commission potential?

Take all the above information into consideration and roughly calculate your sales potential. Check out the listing in the following table of the average premium for each type of structure insured in your state. What commission does your company pay? Do the calculation!

What's my overhead cost?

Only you can answer this question in regard to salaries, office space, advertising, and other costs. In terms of expenses incurred to work with the NFIP, there's the cost of the Flood Insurance Manual, maps, and the NFIP's low training fees. If you do your training online, it's free.

Advertising costs are significantly lowered through the NFIP. FIMA and WYO companies offer cooperative advertising opportunities. In most instances, ad copies are ready for print, and scripts for radio spots are also provided. Contact your WYO carrier or call the NFIP at 800-564-8236 for more information.

And don't forget, with NFIP flood insurance, there are no loss ratios or contingencies to worry about!

Selling flood insurance is profitable!

The definition of risk is the chance of loss. Can you afford to risk the chance of a losing a flood sale? \overline{W}

Judy Marvel has worked with the NFIP for 27 years, first as an insurance agent in coastal Delaware, and for the last 6 years as the Senior Training Specialist with the NFIP Bureau and Statistical Agent.

STATE STATS

Data as of September 30, 2002	AL	AK	AZ	AR	CA	СО	СТ	DE	DC	FL	GA	GU
Total Number of Policies in Force	39,034	2,526	28,248	14,210	281,224	15,425	29,468	17,162	1,141	1,794,861	65,370	199
Distribution of NFIP Policies By Occupancy Type												
Single Family	23,439	1,884	24,127	11,507	227,250	9,903	19,630	11,029	250	1,035,696	54,836	153
Two- to Four-Family	1,485	154	1,063	927	18,213	828	2,007	1,240	14	83,708	2,510	18
Other Residential	11,576	249	1,685	434	20,605	2,586	5,742	4,351	849	622,210	5,323	11
Nonresidential	2,534	239	1,373	1,342	15,156	2,108	2,089	542	28	53,247	2,701	17
Distribution of NFIP Policies By Zone												
A Zones	21,940	1,708	21,193	10,963	123,714	9,299	18,728	12,160	49	1,364,980	41,116	127
V Zones	3,705	23	0	0	876	0	1,142	1,359	0	36,429	1,098	8
B, C, and X Zones	13,226	645	6,973	3,189	82,805	6,070	9,570	3,589	1,092	386,200	23,044	56
Other (Emergency Program, D Zones Etc.)	163	150	82	58	73,829	56	28	54	0	7,252	112	8
Distribution of Special NFIP Policies												
PRP ¹	4,333	309	4,097	1,650	50,350	3,135	3,595	1,573	236	195,481	17,764	2
RCBAP ²	11,135	253	1,482	176	14,889	2,322	5,712	5,054	836	573,400	4,582	6
MPPP ³	208	0	68	94	176	66	19	26	2	1,120	187	0
All Other Policies	23,358	1,964	22,601	12,290	215,809	9,902	20,142	10,509	67	1,024,860	42,837	191
Average NFIP Premiums												
All Building Types	\$404	\$467	\$410	\$419	\$479	\$522	\$638	\$433	\$152	\$323	\$451	\$755
Residential (Combined Single, Two- to Four- Family, and Other)	\$337	\$398	\$373	\$359	\$438	\$418	\$569	\$399	\$89	\$300	\$418	\$597
Commercial (Non-Residential)	\$1,370	\$1,133	\$1,147	\$994	\$1,199	\$1,180	\$1,548	\$1,474	\$2,671	\$1,097	\$1,222	\$2,441
Condo Buildings (RCBAPs)	\$2,703	\$1,154	\$980	\$1,174	\$1,278	\$1,468	\$1,551	\$1,399	\$2,097	\$1,865	\$2,030	\$1,850
Contents ⁴	\$441	\$1,012	\$592	\$1,004	\$603	\$735	\$727	\$342	\$315	\$403	\$403	\$2,216

¹ Preferred Risk Policies

² Residential Condominium Building Association Policies

³ Mortgage Portfolio Protection Program Policies

⁴ Contents data is for policies with contents coverage only

STATE STATS

Data as of September 30, 2002	н	ID	IL	IN	IA	KS	KY	LA	ME	MD	MA	МІ	
Total Number of Policies in Force	44,778	5,438	45,360	26,010	9,614	10,350	20,381	367,111	6,847	50,856	39,251	25,763	
Distribution of NFIP Policies By Occupancy Type													
Single Family	9,037	4,442	35,076	23,178	7,839	8,460	16,579	308,840	5,057	24,494	27,402	21,852	
Two- to Four-Family	1,086	229	1,298	798	256	348	758	26,555	376	2,029	3,532	601	
Other Residential	33,421	350	6,587	710	182	372	828	14,782	636	22,477	5,572	2,304	
Nonresidential	1,234	417	2,399	1,324	1,337	1,170	2,216	16,934	778	1,856	2,745	1,006	
Distribution of NFIP Policies By Zone													
A Zones	15,490	3,304	32,174	20,934	7,403	7,128	14,615	231,948	3,631	35,963	25,307	19,254	
V Zones	4,505	0	0	0	0	0	0	2,669	347	2,564	2,389	0	
B, C, and X Zones	24,332	2,125	12,736	4,970	2,056	3,145	5,270	120,955	2,854	12,250	11,547	6,408	
Other (Emergency Program, D Zones Etc.)	451	9	450	106	155	77	496	11,539	15	79	8	101	
Distribution of Special NFIP Policies													
PRP ¹	939	1,564	6,736	2,536	921	1,774	1,908	80,865	1,198	4,838	4,368	2,726	
RCBAP ²	32,375	257	5,789	302	44	126	567	9,746	563	22,130	5,213	1,740	
MPPP ³	0	30	126	85	60	56	350	876	3	30	10	133	
All Other Policies	11,464	3,587	32,709	23,087	8,589	8,394	17,556	275,624	5,083	23,858	29,660	21,164	
Average NFIP Premiums													
All Building Types	\$299	\$417	\$488	\$503	\$545	\$486	\$469	\$412	\$564	\$319	\$668	\$505	
Residential (Combined Single, Two- to Four- Family, and Other)	\$260	\$373	\$443	\$466	\$432	\$405	\$391	\$384	\$485	\$284	\$594	\$471	
Commercial (Non-Residential)	\$1,709	\$943	\$1,287	\$1,190	\$1,245	\$1,120	\$1,106	\$1,003	\$1,183	\$1,238	\$1,649	\$1,345	
Condo Buildings (RCBAPs)	\$4,140	\$1,433	\$2,407	\$1,300	\$646	\$406	\$950	\$1,086	\$1,148	\$1,824	\$1,906	\$1,352	
Contents ⁴	\$536	\$500	\$557	\$751	\$739	\$744	\$665	\$410	\$431	\$293	\$781	\$653	

¹ Preferred Risk Policies

² Residential Condominium Building Association Policies

³ Mortgage Portfolio Protection Program Policies

⁴ Contents data is for policies with contents coverage only

MN	MS	МО	MT	NE	NV	NH	NJ	NM	NY	NC	ND	ОН	ок	OR	PA
8,602	41,863	22,049	3,090	13,068	13,797	4,931	182,318	11,892	95,637	104,336	5,751	33,818	14,455	26,273	59,999
7,127	34,713	15,967	2,718	11,400	11,287	3,315	114,635	10,305	75,169	80,546	4,406	27,257	11,974	21,422	44,184
176	1,350	1,042	96	360	314	461	28,004	474	7,786	4,806	213	1,441	416	1,023	4,462
543	2,128	679	60	261	1,045	602	31,686	239	8,391	12,682	391	1,993	543	1,820	3,015
756	3,672	4,361	216	1,047	1,151	553	7,993	874	4,291	6,302	741	3,127	1,522	2,008	8,338
4,867	29,896	15,914	1,972	11,388	10,153	3,310	156,748	9,666	61,177	62,016	2,939	25,473	9,651	15,680	31,027
0	410	0	0	0	0	37	2,550	0	3,041	5,541	0	0	0	294	0
3,598	11,331	5,949	1,075	1,599	3,627	1,583	21,571	2,181	31,318	32,107	2,723	8,159	4,731	10,249	28,483
137	226	186	43	81	17	1	1,449	45	101	4,672	89	186	73	50	489
2,384	6,868	2,894	744	791	2,094	728	8,609	1,269	12,748	18,937	1,826	4,007	2,555	6,759	15,262
379	1,150	210	34	54	706	569	39,953	127	6,831	12,945	183	1,449	188	1,476	1,604
17	438	145	15	36	31	3	83	80	133	148	17	213	71	54	86
5,822	33,407	18,800	2,297	12,187	10,966	3,631	133,673	10,416	75,925	72,306	3,725	28,149	11,641	17,984	43,047
\$477	\$414	\$554	\$443	\$452	\$435	\$558	\$515	\$423	\$604	\$414	\$451	\$513	\$448	\$457	\$536
\$408	\$361	\$389	\$415	\$404	\$341	\$483	\$467	\$387	\$564	\$370	\$387	\$437	\$389	\$408	\$404
\$1,197	\$961	\$1,224	\$814	\$995	\$1,473	\$1,151	\$1,574	\$877	\$1,472	\$1,099	\$885	\$1,254	\$947	\$1,051	\$1,352
\$1,585	\$1,101	\$964	\$866	\$1,215	\$2,358	\$1,501	\$912	\$1,105	\$1,940	\$1,601	\$2,662	\$1,014	\$793	\$1,632	\$3,033
\$579	\$597	\$1,091	\$751	\$653	\$1,189	\$621	\$526	\$745	\$557	\$477	\$649	\$676	\$613	\$635	\$627

STATE STATS

Data as of September 30, 2002	PR	RI	sc	SD	TN	TX	UT	VT	VI	VA	WA	wv	WI	WY
Total Number of Policies in Force	43,568	11,367	135,644	3,022	15,995	450,663	2,379	2,889	2,473	77,719	27,581	19,773	12,578	1,919
Distribution of NFIP Policies By Occupancy Type														
Single Family	33,847	8,479	84,323	2,648	12,199	393,693	1,587	1,782	680	60,483	23,386	16,467	10,307	1,671
Two- to Four-Family	1,206	656	9,100	67	1,021	7,022	158	331	225	3,090	946	494	927	44
Other Residential	5,657	1,349	37,036	40	904	31,933	393	136	857	10,272	948	229	469	60
Nonresidential	2,858	883	5,185	267	1,871	18,015	241	640	711	3,874	2,301	2,583	875	144
Distribution of NFIP Policies By Zone														
A Zones	36,377	6,857	96,360	1,659	10,285	140,889	1,125	1,916	1,769	49,055	18,436	13,549	9,130	1,150
V Zones	1,002	1,161	7,089	0	1	5,408	0	0	18	616	93	0	0	0
B, C, and X Zones	5,786	3,345	32,046	1,359	5,632	292,124	1,246	959	685	27,561	8,963	5,055	3,384	732
Other (Emergency Program, D Zones Etc.)	403	4	149	4	77	12,242	8	14	1	487	89	1,169	64	37
Distribution of Special NFIP Policies														
PRP ¹	1,586	1,391	20,270	639	3,065	241,784	813	421	38	18,924	6,008	2,233	2,179	516
RCBAP ²	5,388	1,313	40,730	0	841	22,961	341	75	764	9,859	891	54	203	18
MPPP ³	1	4	181	24	112	600	9	3	0	45	39	199	60	8
All Other Policies	36,593	8,659	74,463	2,359	11,977	185,318	1,216	2,390	1,671	48,891	20,643	17,287	10,136	1,377
Average NFIP Premiums														
All Building Types	\$405	\$700	\$416	\$482	\$468	\$362	\$456	\$574	\$546	\$400	\$466	\$484	\$496	\$485
Residential (Combined Single, Two- to Four- Family, and Other)	\$355	\$599	\$378	\$412	\$375	\$331	\$352	\$445	\$353	\$353	\$415	\$376	\$446	\$437
Commercial (Non-Residential)	\$1,114	\$1,910	\$1,372	\$1,205	\$1,165	\$1,097	\$1,379	\$1,024	\$1,026	\$1,299	\$1,031	\$1,200	\$1,173	\$1,071
Condo Buildings (RCBAPs)	\$2,731	\$2,297	\$1,689	\$0	\$623	\$1,833	\$1,166	\$1,047	\$1,868	\$1,216	\$714	\$883	\$1,828	\$912
Contents ⁴	\$491	\$765	\$406	\$549	\$915	\$412	\$1,096	\$737	\$1,067	\$541	\$502	\$617	\$788	\$351

¹ Preferred Risk Policies

² Residential Condominium Building Association Policies

³ Mortgage Portfolio Protection Program Policies

⁴ Contents data is for policies with contents coverage only

Appalachia

switched from wood to coal as the

influx of workers and their families

seeking good jobs in the mines. As

the demand for coal has risen and

fuel of choice. Appalachia had an

Frank Beam, FEMA

ppalachia covers a 13-state region from New York to Mississippi. West Virginia is the only state that lies entirely within the region. A beautiful state of low mountains

and plunging valleys rich in coal and American history, it also has one of the nation's highest cancer rates (due in part to what has been

an epidemic



described as West Virginia flooding, July 2002

of male smoking), one of the highest rates of drug use and unemployment among that same segment of its population, and an increasingly elderly population. All of these place a significant drain on West Virginia's treasury.

And then there are the floods.

On July 8, 2001, flooding damaged more than 1,000 homes in West Virginia. Of those, 670 were demolished, and the land was turned into green space with FEMA mitigation funds. In May 2002, an additional 3,000 homes and businesses were damaged or destroyed by floods. Of these, 200 to 300 buildings will not be repaired or rebuilt.

Coal Miners' Heaven?

In the 1800s, as the nation's East Coast forests were rapidly disappearing, the railroads and industry fallen, so has West Virginia's economy. In recent years, mountaintop removal mining has dropped the number of subsurface mines, and miners have found themselves without jobs. It makes for hard times when there is no market for skills learned in the mines, and few nonmining jobs.

Ironically, the movement of the mountaintop overburden into the valleys has been blamed for some of the flooding, as streams that once discharged flood waters are now silted up and jump their banks. The only sure thing seems to be that when it rains in West Virginia, homes will be in the path of water that flows down steep gradients on its way to the ocean. It is no wonder that the region created Bluegrass songs like "Man of Constant Sorrow," which first appeared in a 1913

songbook by a blind Kentucky-born musician named Richard Burnett and was featured in the movie "Oh Brother Where Art Thou."

Who Gets Insured?

The plight of unemployed and underemployed property owners in Appalachia is an important one for the NFIP because it highlights a dilemma for this government program. Various NFIP stakeholders have told FEMA that it must make a choice between running the Program either as an insurance business or as a social program. When we are insuring expensive second homes on the coasts, occupied by citizens who could choose to live anywhere they please, the business approach may seem to be the best choice. But, when it comes to our fellow citizens in Appalachia, we need to continue to provide disaster assistance and use mitigation programs to address the issues of safety and repetitive loss. By reducing repetitive losses, mitigation efforts will help West Virginia shift resources from disaster relief to bringing new jobs into the state and stemming the flow of its younger citizens to other states, particularly the graduates of the state's colleges and universities. Our nation's ability and willingness to see that no one is left behind requires nothing less. **W**

Frank Beam has worked at FEMA's National Processing Service Center (NPSC) since 1994. Focusing primarily in the area of flood zone determinations, he is the Chief of Flood Mapping at the NPSC.

The PRP Success Story

Michael McFadden, NFIP Bureau and Statistical Agent

Representing more than 17 percent of overall policy base, the Preferred Risk Policy (PRP) is the NFIP's fastest growing product. From fiscal 1997 through fiscal 2001, while overall policy growth was 14.1 percent, the PRP achieved 72.2 percent growth. During that 5-year period, the PRP accounted for nearly 60 percent of all policy growth.

What is behind the PRP's remarkable success?

About 14 years of dedication and smart, assertive marketing by insurance agents and other NFIP stake-holders.

In the Beginning

The PRP was introduced in January 1989, in response to requests of Write Your Own (WYO) companies, agents, lenders, and others for a "flat-fee, fixed-amount" flood insurance product designed to:

- Provide inexpensive coverage in low- to moderate-risk flood zones; and
- Simplify application, processing, and servicing for agents, WYO companies, and the NFIP Servicing Agent.

Additional reasons for introduction of the PRP were to broaden the geographic distribution of NFIP policies, to increase the policy base (especially among properties with a lower risk of flooding), and thereby to reduce what actuaries call "adverse selection." (The authors of a 1988 FEMA report on the actuarial feasibility of introducing the PRP proposed the following explanation of that phenomenon. Adverse selection occurs, they wrote, because "the

very nature of the flood hazard is such that only the generally poorer risks insure at all; few homeowners 100 miles from a water source and 100 feet above Base Flood Elevation purchase flood coverage.")

The PRP was an immediate hit both with agents and with eligible homeowners. Agents liked the new product because the application form was short and simple—and premiums had been precalculated. Homeowners liked the policy because it afforded them solid protection of building property and personal property for a very reasonable premium.

Simpler Can Be Better

Today, as in 1989, the PRP provides fixed combinations of building coverage and contents coverage priced against a simple schedule of flat-fee premiums.

The basic combination of \$20,000 building coverage and \$5,000 contents coverage costs only \$106 per year for the owner of an eligible building without basement or enclosure (\$131 with basement or enclosure).

The top-of-the-schedule combination of \$250,000 building coverage and \$60,000 contents coverage is a bargain, too, at only \$301 per year for an eligible building without basement or enclosure (\$326 with basement or enclosure). By contrast, the fiscal 2001 average premium of \$377 for all NFIP policies bought, on average, about \$135,000 of insurance coverage.

The PRP premium includes Federal Policy Fee and Increased Cost of Compliance (ICC) premium.

(Because ICC coverage is not applicable to townhouse/rowhouse condominium units, \$6 is deducted from the flat-fee premium for those buildings.)

Eligibility Criteria

Written on the Dwelling Form, the PRP is available to the owner of almost any single-family residence or almost any dwelling unit in a two- to four-family residential building located in low- to moderate-risk B, C, or X flood zones within a Regular Program community.

Except for townhouse/rowhouse buildings, condominium units are not eligible for the PRP. Buildings that have a history of significant flood losses are not eligible.

To keep the premium as low as possible, FIMA has refined PRP underwriting guidelines several times over the years. Most recently, in October 2001, FIMA began requiring that new-business applications for the PRP include documentation that the building to be insured is located in a B, C, or X Zone on the policy's effective date.

As explained in the Preferred Risk Policy section of the NFIP Flood Insurance Manual, the documentation must be a photocopy of one of the following.

- FEMA Letter of Map Amendment (LOMA) or Letter of Map Revision (LOMR).
- Current flood map marked to show the building's exact location and flood zone.
- Letter containing the same information and signed by the appropriate community official.

- Elevation certificate containing the same information and signed by a surveyor, engineer, or architect, or by the appropriate community official.
- Flood zone certificate from a flood zone determination company that guarantees the accuracy of its information.

Although the flood zone documentation requirement has added another step to the application process, agents on the whole have responded favorably. Agents committed to "working smarter, not harder" quickly figured out that the community official in charge of floodplain management usually has one or more forms of the required documentation, which the agent may photocopy.

When Is a PRP Not a PRP?

As a result of agents' support for the flood zone documentation requirement, the number of PRPs written in ineligible zones has begun to decrease over the past year or so.

Savvy agents keep two things in mind to avoid writing PRPs on ineligible properties.

<u>Check for recent flood map revisions.</u>

PRP zone eligibility is governed by the building's flood zone on the effective date of the new or renewed policy. "Grandfathering" of flood map zones is not allowed under the PRP.

<u>Determine the loss history of the building.</u>

This is a crucial step in the application process, but it can be time consuming. Experienced NFIP agents check first with the community official in charge of building permits. If a

building has had two or more significant flood losses, it probably is ineligible for the PRP. That holds true even if the present policy applicant did not own the building at the times of previous loss. (Loss history criteria are detailed in the PRP section of the Flood Insurance Manual, in the "Notice" section of the PRP Application form, and in the "PRP Eligibility Checklist" accompanying this article. You may wish to photocopy the checklist for future reference.)

The NFIP Bureau and Statistical Agent, in Lanham, Maryland, generates two monthly reports to help WYO companies, the NFIP Servicing Agent, and WYO and Direct agents keep on top of PRP eligibility. These are "Invalid Preferred Risk Policies (PRPs) Based on Ineligible Flood Risk Zone" and "Invalid Preferred Risk Policies (PRPs) Based on Loss History." Both reports include new business PRPs, renewed PRPs, and PRPs that will be up for renewal in not less than 120 days. Because PRPs renew automatically, it is important for recipients of these reports to monitor them closely, every month.

A Safer and Sounder Future

The Preferred Risk Policy is here to stay. With continued dedication and smart, assertive marketing by agents and other stakeholders, the PRP just might be, as some believe, the best and brightest hope for taking flood insurance to all Americans and making the NFIP more actuarially sound.

Michael McFadden has worked with flood insurance for 5 years as a member of the NFIP Bureau and Statistical Agent Department of Technical Assistance and Communications.

Preferred Risk Policy (PRP) Growth Fiscal 1997 through Fiscal 2001								
Fiscal Year (Oct. 1 - Sep. 30)	PRPs in Force	All Policies in Force	PRPs as Percentage of All Policies					
1997	442,380	3,811,253	11.6					
1998	613,657	4,117,936	14.9					
1999	622,354	4,187,729	14.9					
2000	684,670	4,269,694	16.0					
2001	761,731	4,347,855	17.5					
Preferred Ri	sk Policies	All Polic	cies					
Policy Count Growth 319,351	Percentage Growth 72.2	Policy Count Growth 536,602	Percentage Growth 14.1					

2001.

NFIP Agent's Preferred Risk Policy Eligibility Checklist

1. Community Status, Flood Zone, and Building Type

- Is the building located in a Regular Program community?
- Is the building located in flood zone B, C, or X, according to the current flood map (no "Grandfathering")?
- Is the building a one- to four-family residence or a townhouse/rowhouse?

If the answer to ANY question in part 1 above is NO, the building is INELIGIBLE for a PRP.

2. Flood Loss History

Has the building ever been the subject of:

- Two NFIP claim payments, each more than \$1,000?
- Three or more NFIP claim payments, regardless of amount?
- Two Federal Disaster Relief payments (including grants or loans) for flood damage, each more than \$1,000?
- Three or more Federal Disaster Relief payments (including grants or loans) for flood damage, regardless of amount?
- One NFIP claim payment and one Federal Disaster Relief payment (including a grant or loan) for flood damage, each more than \$1,000?

If the answer to ANY question in part 2 above is YES, regardless of who owned the building at the times of previous loss, the building is INELIGIBLE for a PRP.

3. Flood Zone Documentation

To document that the building is in a B, C, or X flood zone on the policy's effective date, the agent must enclose a copy of one of the following with the completed PRP Application form:

- FEMA Letter of Map Amendment (LOMA) or Letter of Map Revision (LOMR); or
- Current flood map marked to show the building's exact location and flood zone; or
- Letter containing the same information and signed by the appropriate community official: or
- Elevation certificate containing the same information and signed by a surveyor, engineer, or architect, or by the appropriate community official; or
- Flood zone certificate from a flood zone determination company that guarantees the accuracy of its information.

The PRP Application form CANNOT BE PROCESSED UNLESS it is accompanied by a copy of one of the documents in part 3 above.

CBRA Report Shows Taxpayer Savings

Paul Souza, U.S. Fish and Wildlife Service

'he Coastal Barrier Resources Act (CBRA) has celebrated its twentieth birthday. Signed into law on October 18, 1982, CBRA is a rare, market-based approach to environmental protection. By withholding Federal funds for development and disaster relief, CBRA sought to protect valuable habitat for fish and wildlife, discourage people from building in the path of hurricanes, and save taxpayers' money. Restrictions on Federal flood insurance apply in Coastal Barrier Resources System areas and "otherwise protected areas," which are depicted on FIRMs.

In a report sent to Congress in September 2002, the U.S. Fish and

Wildlife Service demonstrated that CBRA has saved Americans a lot of cash during its 20 years. The report looked at Federal spending for disaster relief, roads, potable water, and wastewater, and found that CBRA has saved more than \$1 billion. Furthermore, CBRA will keep saving dollars as long as it exists. Another

\$200 million in disaster relief may be saved by 2050. You can find the report at the Fish and Wildlife Service web site (www.fws.gov/cep/Tax-payerSavingsfromCBRA.pdf).

We also know that CBRA works best when our State and local partners add layers of protection onto

CBRA's fiscal disincentive. Texas, for example, prohibits State-backed windstorm insurance in the areas designated by CBRA. On Dauphin Island in Alabama, the State's coastal construction control line coincides with the CBRA boundary, and the local government has zoned the entire area for conservation and park land. The National Audubon Society is buying CBRA lands in North Carolina and will hold them in trust for fish and wildlife in perpetuity. The Act's limitations on Federal spending undoubtedly allowed Audubon to purchase coastal barrier lands at a comparatively low cost.

The Fish and Wildlife Service's partnership with the NFIP is a critical



Izembek National Wildlife Refuge, Alaska (photo US FWS)

underpinning for CBRA. Often, people learn about CBRA when they apply for a flood insurance policy. It is therefore important for our agencies to strive for seamless integration of CBRA boundaries into FIRMs, which will improve customer service by clearly showing property owners



and officials in communities that participate in the NFIP where restrictions on Federal flood insurance apply.

Creating digital CBRA maps will help foster this integration. As we look to the future, the Fish and Wildlife Service and the NFIP should find ways to use today's technology to improve the precision of CBRA boundaries on FIRMs and the maps adopted by Congress. We are taking some initial steps to digitize boundaries and hope to have better mapping tools available in the next couple of years. Eventually, State and local governments will be able to integrate Act boundaries into their planning tools and use them to help target their conservation efforts and get more for their money. We believe this will improve customer service and help meet all the intentions of this unique law. W

Paul Souza is the National Coastal Barriers Coordinator for the U.S. Fish and Wildlife Service.

In a State of Mitigation

urricane Floyd formed in mid-September 1999, when it began to affect the coastlines of Georgia and Southeastern Florida with heavy rains. At its worst, Floyd was a Category 4 (almost a 5) hurricane while in the Atlantic Ocean, but it dissipated as it approached the coast and was a Category 2 hurricane when it made landfall at Cape Fear, North Carolina, on September 16. Later that day, it was downgraded to a tropical storm as it moved up the Atlantic Coast through Virginia to Maine.

Almost all the damage caused by Floyd was from the rain that was dumped inland at Kinston, North Carolina, and Franklin, Virginia. The National Hurricane Center reports that Floyd was in fact the largest hurricane to make landfall in the U.S. since Hurricane Hugo struck 10 years earlier. Leaving 56 dead in its wake, Floyd also became the deadliest storm in the U.S. since Tropical Storm Agnes made landfall in 1972.

Hurricane Floyd had a devastating impact on most of the Eastern Seaboard, producing 13 Presidential Disaster Declarations, the most given for any single hurricane or other event, including the Midwest floods of 1993. Altogether, the NFIP paid more than \$420.5 million for almost 18,700 claims that resulted from Hurricane Floyd. In North Carolina alone, more than \$169 million was paid on almost 8,000 NFIP claims. These were the lucky ones. According to North Carolina's Hurricane Floyd Recovery Governor's Update (July 2000), more than 4,100 uninsured (or underinsured) homes were destroyed by the disaster. The North Carolina Division of Emergency Management reported \$3.5 billion in losses to homes, businesses, roads, and infrastructure.

In the years that have followed Hurricane Floyd, the State of North Carolina has taken a lead in mapping and other mitigation initiatives designed to protect residents from future flooding. We highlight three of these programs here.

Proactive Southern Shores

Mike Hejduk, Town of Southern Shores

When a loss occurs in our community, we are all affected. Flood losses are no exception. When homes and businesses are damaged from flooding, this has

far-reaching financial and environmental consequences for the entire community. The Town of Southern Shores, North Carolina, is taking steps to protect its citizens from flood losses by raising local awareness of the potential of flood damage, by remapping areas to better identify low-to-moderate-risk and high-risk areas, and by adopting practical approaches to mitigating flood losses.

Southern Shores is a small community located on the Outer Banks of North Carolina. Our town is about 4 miles long and I mile wide, and about half of it is located in a Special Flood Hazard Area (SFHA). Incorporated in 1979, Southern Shores has a permanent population of about 2,100 that increases during tourist season to about 10,000. A recent flood insurance policy count listed approximately 1,000 policies in force in our community. Insured property locations range from high-risk to low-to-moderate-risk areas.

The Outer Banks is a chain of barrier islands with a long history of hurricanes, high winds, and coastal flooding. In fact, storms sank so many ships along this stretch of coast-line in the 1800s that it was dubbed the Graveyard of the Atlantic. Because the shipping lanes were vital to the nation's economy, lighthouses and life saving stations were constructed along the ocean side of the Outer Banks to limit loss of life and property.

On the sound side of the Outer Banks, flooding has also been a hazard. While not as dramatic as the erosion found on the ocean side, AE Zones of Base Flood Elevation 9 feet are common over large areas of the barrier island and mainland.

Moving Up

Some our town's mitigation activities inspire awe. The Cape Hatteras Lighthouse, the nation's tallest brick light-

house at about 208 feet, was moved inland in 1999 to prevent damage from island migration. The lighthouse, built 1,600 feet from the original shore in 1870, had to be moved as the coast encroached on its base – leaving it

Did you know that barrier islands migrate?

In the Outer Banks of North Carolina, ocean wave overwash can erode beach areas and deposit the sand in the sound that is, the waves take sand from one side of the island and drop it off on the other.

120 feet from the shore in 1999. At its new location, the beacon is once again 1,600 feet from the Atlantic. This strategy is in keeping with the North Carolina Coastal Area Management Act's guiding principle not to harden beaches with seawalls or bulkheads but to accommodate erosion forces by maintaining an open beach area.

Old-timers practiced mitigation.

Talk to an old-timer when you're building your home, and he will tell you not to nail down the floorboards too well. The water could float a house out to sea, but by allowing flood waters to enter the house through the floor, at least a wet house was better then one floating out to sea. Today we make sure there are breakaway walls and exits for the water flow.

- · Our community is making great efforts to identify improved properties in the low-to-moderate-risk areas as well as properties in the SFHAs.
- We are raising consumer awareness of the link between flood insurance coverage and the mitigation of flood losses.
- We will be using technology to more accurately identify areas at risk, thus allowing builders to better plan for

floods. And we are using e-mail to reach out to community residents. We have a broadcast e-mail capability that reaches 440 households out of about 2,215 improved properties. Almost a third of these 440 are property owners who live out of town.

Important lessons were learned from Hurricane Floyd, which caused tremendous flooding and damage in our community in 1999. At the time, our floodplain maps were outdated, and some building components installed below the Base Flood Elevation (BFE) did not meet floodresistance requirements for residential structures. In cases such as these, the homeowner may have to elevate the building so that the upper side of the lowest habitable floor is at or above the BFE. In fact, the new FEMA Coastal Construction Manual states that locally adopted freeboard requirements and the Design Flood Elevation (DFE) be mandated for all new construction. But we've gone a little further.

Our Southern Shores Flood Damage Prevention Ordinance requires 2 feet of freeboard above the BFE. Recent federal and state interpretations of the floodplain regula-

tions have determined that HVAC ductwork is "equipment" and must be located above the freeboard level as well.

Our Shores Plan Review and Development **Permit Process** requires all build-

Floyd

Can I surf a "freeboard"? No, but ensuring that you meet freeboard requirements adds an extra

safety factor to a building. The NFIP defines "freeboard" as a margin of safety added to the BFE measurement to account for waves, debris, miscalculations, or lack of data. Freeboard has proved to be a successful method for reducing flood damage and compensates for the many uncertain factors that contribute to flood heights greater than the BFE, like velocity of the wave and tidal effects.

Base Flood Elevations up to 18 feet above mean sea level. **Understanding the Risk**

Southern Shores was particularly interested in identifying the number of improved properties in the SFHA that do not have policies. We learned that as many as 397 buildings within the SFHA were not covered by flood insurance. It seems probable that many of those property owners may not understand their exposure to flooding. Our challenge was to determine how to address this issue. Following are some of the ways we've responded.

Other of our mitigation activities are simply necessary.

For example, currently, those homes that are "imminently

within 20 feet of the erosion escarpment) are required to

threatened" (defined by the NFIP as having a foundation

be relocated landward on the property within 2 years. Oceanfront properties may be mapped VE Zones with

- We have created and maintain a database of properties defined by tax parcel.
- We have two electronic versions of our flood hazard boundaries that can be used in mapping.
- We've had a local engineering firm scan our current Flood Insurance Rate Map (FIRM) to check it against FEMA's Q3 file.
- We plan to scan previous editions of our FIRM for archive and research purposes.
- The community sent all property owners a survey to determine whether they knew their exposure to the double threat of erosion and flooding. Many didn't understand the risk of erosion, particularly owners living on the sound side of the island who did not realize that they, too, were at risk from both flooding and erosion. Hurricane Floyd brought these misunderstandings to light and has led to an extensive remapping effort by the State of North Carolina.

ing components below the DFE to be manufactured with flood-resistant materials in keeping with current federal and state advisories. Practically speaking, this means that the bottom of untreated floor joists, batt insulation in the floor system, HVAC ductwork, and under-floor wiring must not be below the DFE. Garage and storage room wall framing below DFE must be preservative treated. Builders are instructed to calculate any measurements from the lowest original or natural grade at the corners of the proposed structure—not the BFE or DFE.

Taking Action

Our community is working on many levels to improve and expand mitigation efforts, at home and across North Carolina. Following are a few examples of outreach activi-

ties under way locally and statewide.

- Legislators in North Carolina are looking at instituting mandatory flood zone disclosure laws across the State.
- We use our e-mail data base to send mitigation information to year-round and seasonal property owners. We also do two annual mailings to the community. In addition,

Raising buildings can lower premiums!

Homeowners can realize flood insurance rate reductions for each additional foot of elevation of the lowest floor above the BFE up to a maximum of 4 feet. For example, a lowest floor elevation of +1 foot above BFE might have a rate of \$.35/\$100 insurance coverage while a lowest floor elevation of +3 feet above BFE could have a rate of \$.16/\$100 of coverage.

we have a web site (www.southernshores.org).

- The real estate community has allowed us to distribute literature to agents in the local home office of the Outer Banks Association of Realtors®.
- The local and state insurance community has been accessible, supportive, and helpful, and we continue to work in concert to ensure that all NFIP policies are properly rated.
- We even contacted the North Carolina Department of Crime Control and Public Safety for information.
- We're a small community and have no "official" community planner. So we contacted various nearby communities to seek their assistance in updating and developing our floodplain management and hazard mitigation plan.

We challenge other communities to step forward and emulate our efforts. We'll be glad to share with you what we've learned about local initiatives to protect residents

Residents rate discounted premiums!

In recognition of our town's various efforts to protect its residents from flooding, the NFIP's Community Rating System program has given Southern Shores a Class 6 rating for more than 5 years. Residents who purchase NFIP flood insurance coverage have been realizing a 20 percent discount on their flood insurance premiums.

while conserving the natural beauty of the area. [Editor's Note: You may need help interpreting state and local ordinance requirements for preventing flood damage. The FEMA Regional Office is the best place to start if you need this kind of assistance. Contact information is located on the tear-off flap on the back cover.]

Mike Hejduk is the Code Enforcement Administrator for the Town of Southern Shores, North Carolina (codes@southernshores.org). Hejduk has Level III Inspector Standard Certificates in Building, Fire, Mechanical, Electrical, and Plumbing. A 1979 graduate of the U.S. Coast Guard Academy, New London, Connecticut, he is a North Carolina Licensed Professional Engineer.

North Carolina Takes on Mapping

Doug Bellomo, FEMA

The State of North Carolina, FEMA, and several additional federal, state, and local agencies have entered into the first Cooperating Technical State agreement, whereby North Carolina will assume primary ownership of and responsibility for the flood maps of all communities in the State.

That means North Carolina is in control of the mapping process from creation to distribution. This statewide program includes acquiring new elevation data, conducting flood hazard analyses, and producing digital Flood Insurance Rate Maps (FIRMs), as well as meeting stakeholder needs by implementing a state-of-the-art information technology system and executing an aggressive outreach plan.

North Carolina was motivated to enter this agreement in large part due to the extreme risk of damage that the State faces from hurricanes and flooding. In August 2000, the North Carolina General Assembly allocated \$23 million to the Floodplain Mapping Program. Subsequently, \$3 million was appropriated by the North Carolina Department of Transportation. In addition, FEMA has contributed \$10 million and pledged in-kind contributions of engineering, map-

ping, and program management services to the North Carolina Floodplain Mapping Program.

Work is well under way on the mapping program's first phase, which includes the six eastern river basins—Cape Fear, Lumber, Neuse, Pasquotank, Tar-Pamlico, and White Oak. These river basins, which were heavily affected by Hurricane Floyd, account for nearly half of the State, and include 57 counties, 323 communities, and approximately 21,200 miles of streams and rivers.

Technological advancements have made it possible for automated engineering and mapping to be performed at a fraction of the cost that was previously possible. As of September 2002, preliminary FIRM panels for portions of seven counties had been issued; several more were completed by year's end. When each county is issued a preliminary FIRM, the State holds outreach meetings with public officials and citizens to provide information about use of the new maps and to ensure a thorough review process.

As part of FEMA's partnership with the State of North Carolina, an enhanced map format has been established that serves both state and federal mapping needs. These FIRM panels use aerial imagery as a base, include expanded notes to users, and contain a panel locator diagram. In addition, virtually all Special Flood Hazard Areas (SFHAs) will display a Base Flood Elevation because areas previously designated as approximate A Zones will be studied in detail.

Visit the North Carolina Floodplain Mapping Program web site for more information (www.ncfloodmaps.com).

Doug Bellomo is a Project Officer for FEMA Regions I-V. He is responsible for NFIP mapping activities in the eastern half of the United States, provides guidance on technically challenging cases regarding coastal issues for Regions I-V, and is responsible for several Map Modernization objectives, including post-flood hazard verification, improving the LOMR process, and the U.S. Fish and Wildlife Service Partnership to Improve Mapping of CBRS Areas.

Definition

Sheet Flow Hazard

A sheet flow hazard can spell disaster for a factory that produces bed linens. But, after a heavy rainstorm, it also can be dangerous for structures located on sloping land. According to the Flood Insurance Manual, a sheet flow hazard is:

"A type of flood hazard with flooding depths of I to 3 feet that occurs in areas of sloping land. The sheet flow hazard is represented by the zone designation AO on the FIRM."

GIS What?

After the devastating floods that resulted from Hurricane Floyd in September 1999, and other more recent flooding events, FEMA, the State of North Carolina Office of Emergency Management, Kinston-Lenoir County, and Environmental Systems Research Institute, Inc., have collaborated on a project to show how geographic information systems (GIS) can be used as a planning and marketing tool to promote hazard mitigation.

Kinston-Lenoir County, North Carolina, serves as a case study for this project because this community has embarked on a long-range hazard mitigation planning effort that includes the development of GIS databases and applications to help in the assessment, planning, tracking, and outreach functions of floodplain management.

Floodplain management, mitigation planning, outreach, and creditable project documentation are intrinsically related; this project provides examples of using GIS data and maps to educate residents, elected officials, and other decision-makers about the benefits of floodplain management. A wide range of resources and GIS information has been incorporated onto a CD tailored to North Carolina and then offered to citizens in Kinston-Lenoir County. See Re:Sources on page 38 for more information about the CD and how to order a copy. W

2003 NATIONAL FLOOD CONFERENCE

KEEPING RISK AT BAY

Join us for the 2003 National Flood Conference! This year's conference will be held May 27-30 at the Hilton San Francisco and Towers, one of the premier hotels in San Francisco, California.

What is new this year? For the first time, the popular stakeholder Town Halls will be held the second day of the conference to give attendees the opportunity to raise issues and concerns early and allow for more discussion of these prior to the Hot Issues panel held the final day of the conference. Also new this year will be a luncheon to recognize NFIP award winners. The luncheon will replace the evening awards banquet held in the past. Dozens of workshops have been planned to address the latest NFIP changes as well as to introduce the basics to those new to the Program. Speakers and panelists at the opening and closing general sessions, as well as the Thursday stakeholder Town Halls, will provide their insights into issues related to flood insurance and mitigation. If you've never attended a National Flood Conference (NFC) in the past, be sure to read about activities from previous NFCs in the Watermark (see pages 6-13 of the Fall 2002 edtion, pages 1-8 of the Fall 2001 newsletter, and pages 1-9 of the Spring/Summer 2000 issue). The Watermark is available at the NFIP web site (www.fema.gov/nfip).

Information about the conference and electronic registration is available at the conference section of the NFIP web site

(www.fema.gov/nfip/2003conf.htm) or contact Catherine King at the NFIP Bureau and Statistical Agent for more information or a mailable registration form (301-918-1439 or catheriner.king@fema.gov).

NFIP Repays Loan—with Interest!

n November 2002, the NFIP repaid, with interest, all monies borrowed from the U.S. Treasury to cover flood insurance claims resulting from Tropical Storm Allison, which struck the Gulf Coast in June 2001. The NFIP borrowed \$650 million to help cover the approximately \$1.1 billion in claims from Allison, the most expensive flood event in the 34-year history of the NFIP.

"I am proud that FEMA can meet its goal of minimizing the suffering and disruption of disasters through the flood insurance program at no cost to the taxpayers," FEMA Director Joe M. Allbaugh said.

FIMA Administrator Anthony S.
Lowe emphasized that borrowing is an anticipated and standard procedure within the NFIP. "Congress provided the NFIP with borrowing authority because it recognized that floods occur irregularly and that several in rapid succession might require cash reserves," Lowe explained. "Later, when heavy flood losses return to average or below-average levels, funds borrowed from the Treasury are paid back, with interest, from premium income."

The NFIP's flood insurance rates are based on anticipated claims over the long term. During certain periods, however, premium income may need to be supplemented to cover claims in the aftermath of severe storms, as has happened several times in recent years. A previous round of borrowing followed several major flood disasters that began with the Louisiana floods of 1995, which resulted in flood insurance claims totaling nearly \$584 million. All funds borrowed to cover claims resulting from this string of floods were repaid the same month Allison hit the U.S. W

New Digital PO

EMA's new Digital Post Office provides online viewing and downloading of more than 100,000 unique map products such as flood Insurance Rate Maps (FIRM), Flood Hazard Boundary Maps (FHBM), and Flood Insurance Studies (FIS). Since the Digital Post Office debuted in May 2002, the number of visitors to the Map Service Center section of FEMA's web site has more than quadrupled while the amount of time needed to distribute map products has been reduced from days to minutes.

Customers can now access flood map information via the Internet, and with these digital products, there is never a need to place a customer request on backorder. In addition, maps can be delivered to disaster sites and disaster field personnel instantaneously.

Because most of FEMA's flood maps are large (24" x 36"), they cannot be printed on a standard office or home printer. The F-MIT tool was created to solve this problem by allowing customers to create a "FIRMette." a user-defined "cut-out" section of the map at 100 percent scale that can be printed on standard paper sizes (see page 17 of the Summer 2002 Watermark for a description of the FIRMettes). F-MIT allows customers to view, zoom in, and pan the image. In addition to viewing online, the F-MIT image viewer can be downloaded directly from the FEMA Map Service Center at no cost. Furthermore, access to scanned maps and studies allows users to incorporate digital map products into their own workflows and business documents.

Viewing the map images is free, and has proven to be a big hit with

the MSC customers. In fact, 95 percent of all customers view products free of charge. Customers only pay if they chose to download the image. The cost to download the image is \$1.50 per panel for fee paying customers. Another significant point to note is that, as the number of web orders increase, other ordering methods are proportionately decreasing.

The vision for the Map Service
Center is to be the one-stop location
to obtain the official FEMA data for
regulatory purposes and to provide
the robust, high-volume computer,
network, and data storage infrastructure to support the needs of NFIP
map and data users. There is a wide
range of geographic related data, mapping products, and enhanced functionality that have been planned for and
will be forthcoming in the next few
years. W

NFIP Telephone Response Center

Frances Balleste, TRC

ne of the activities the NFIP undertakes to promote flood insurance and mitigation is the operation of its Telephone Response Center (TRC). In operation since 1995, the TRC:

- answers questions about the NFIP's rules and regulations;
- fulfills requests for the National Flood Insurance Guide and other documents about flood insurance: and
 - refers (through the Agent Leads Database) prospective policy-
 - holders to agents who can provide flood insurance.

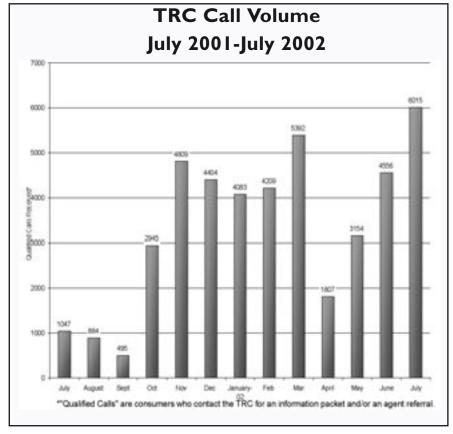
Making the Call

Analysis of calls received by the TRC has shown an increase in inquiries about the NFIP over the years, and a variety of inquiries about NFIP rules and regulations. In October 2001, the NFIP embarked on a television direct-response campaign. We've had increased call volume following the NFIP commercials. The TRC also captures data about response to FIMA's print and radio advertising.

The TRC works closely with the FEMA Distribution Center, the Map Service Center, the NFIP Bureau and Statistical Agent, and the NFIP Direct. When necessary, callers are referred to one of these organizations to order maps, clarify coverage on a specific policy, or gather data about a particular flooding event.

Working Nationally to Refer Locally

In cooperation with participating insurance agents and WYO compa-



nies, the TRC refers prospective purchasers to insurance agents in the caller's area, or to the caller's current agent or company to make a flood insurance sale. The TRC's aim is to convert inquiries into sales leads for flood insurance providers.

Working 7 days a week from 8 a.m. until midnight, the TRC provides 16

hours per day of live responses to callers through both voice and TDD.



Frances Balleste has been Project Director of the NFIP's Telephone Response Center since October 1996. Before that, she worked for the NFIP Bureau and Statistical Agent.

Definition

Sheet Flow Hazard

A sheet flow hazard can spell disaster for a factory that produces bed linens. But, after a heavy rainstorm, it also can be dangerous for structures located on sloping land. According to the Flood Insurance Manual, a sheet flow hazard is:

"A type of flood hazard with flooding depths of I to 3 feet that occurs in areas of sloping land. The sheet flow hazard is represented by the zone designation AO on the FIRM."

Certifying Zone Determinations

Beth O'Brien, NFDA

The National Flood Determination Association (NFDA) has implemented a new program to certify flood zone determination companies. The NFDA is a voluntary, non-profit organization comprised of flood zone determination companies, their vendors, and their resellers. The association is dedicated to promoting the interests and success of members involved in making, distributing, and reselling flood zone determinations.

One of the ways the NFDA ensures accuracy and quality in its members is through a variety of certification activities. These range from promoting a philosophy of quality assurance, to developing and offering training, to instituting records requirements, including maintenance of historical records.

Late last summer, certification chair, Cheryl Small, announced the NFDA's new certification program in a letter to members and other flood zone determination vendors. "It is the association's sincere hope that through the certification program we can further represent our industry as professional businesses committed to the critical services we provide and the success of the National Flood Insurance Program," stated Small.

The certification process was developed to assist NFDA members in developing standards for this new business. Although NFDA certification does not guarantee the performance of a flood zone determination company, it does indicate that the company has met the standards of the NFDA.

Flood zone determination companies can now access certification program materials online. A PowerPoint presentation, certification criteria, information about the program, and an application are available at NFDA's new web site (www.floodassoc.com). According to Vicki Chenault, NFDA chair, "The opening of the web site has helped us meet two of our goals: to provide a mechanism for communication and exchange of information within the industry and to foster awareness of the role and importance of the industry among other NFIP constituencies." Recent news is highlighted on the site's home page; news restricted to NFDA members is accessed with a password. \overline{W}

Beth O'Brien is Marketing Manager for Geotrac (a national provider of flood compliance services) as well as a member of the NFDA. Prior to joining Geotrac, O'Brien worked for the NFIP Bureau and Statistical Agent.

Decorate An Abe

Christy Brown, FIMA and Mary Mies, PORTA High School

EMA's Hazard Mitigation Grant Program (HMGP) is authorized under the Stafford Disaster Relief and Emergency Assistance Act to provide grants to States and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the program is to reduce the loss of life and property due to disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster.

The "Decorate an Abe" project in Petersburg, Illinois, describes how one community has stepped forward to use HMGP funds to protect its citizens from future flooding.

Living with the River

Petersburg, Illinois, was built on the Sangamon River because the waterway provided travel and trade benefits.

The river has also been the source of recurrent flooding.

The property owners in the residential area surrounding the river, the oldest part of town, have struggled with numerous river-related problems. In addition to coping with floods, these residents have faced decreasing property values, a lack of recreational facilities and services, a decline in overall living conditions, and a shortage of funds to improve the situation. The majority of the residents are young, single-parent, low-income families.

Following terrible flooding in 1993, residents and officials worked together to develop a solution. The city pursued and received HMGP funding to purchase riverfront properties and to ensure that this property included deed restrictions as perpetual open space. However, because of various land restrictions tied to land re-use, the city did not actively pursue a program for using the acquired lots

for several years. The PORTA High School Community Problem-Solving Team, coached by Mary Mies and Aneita Gates, decided to fill the gap.

The Community Problem-Solving Team (otherwise known as the CmPS) began by identifying the web of problems in which their community was caught. They determined that flooding posed a serious threat to the community and that they could help to address this problem. High school students approached the Petersburg City Council and expressed their desire to take responsibility for a portion of the land and for developing and implementing mitigation measures on it. The City Council was delighted to allow the CmPS members to determine how five of the lots would be used.

The team faced a daunting task in creating a mitigation solution that fit federal restrictions. They also faced a divided community and discouraged public. The students' initial task was to develop a plan that met FEMA guidelines, the needs of the residents, and their budget.

After a great deal of brainstorming, soliciting input from community members, and analyzing their options, the CmPS elected to develop a garden and a pre-school playground on the lots, a solution responsive to the needs of the neighborhood, the requests of the city government, and the demands of the Federal Government. The only challenge remaining for the CmPS was their lack of funding sources.

Team Outreach

The CmPS team applied the same initiative and creativity they'd used for determining the use of their local floodplain to figuring out how to fund the project. CmPS members organized a "Decorate an Abe" contest in honor of former Petersburg resident Abraham Lincoln. Area businesses sponsored and decorated Abraham Lincoln silhouettes, and residents used loose change to vote for their favorites. The "Abes" were later auctioned off to raise additional funds. The team also designed and sold placemats of historic Petersburg. These innovative ideas succeeded not only in raising funds but also in generating awareness of flood risks and enthusiasm for flood mitigation throughout the community.

Excitement for supporting the CmPS project was contagious. As the land was developed, civic organizations donated funds to sponsor specific pieces of playground equipment. A local businessperson donated Lincoln bears to be sold for fundraising. Pre-school children participated in a clean-up day at the site. Virtually every member of Petersburg contributed his or her funds, talents, or energy to making the project successful.

The CmPS team and their project also generated significant media coverage. Team members wrote weekly articles for the local newspaper to publicize the "Decorate an Abe" effort. They also contacted the State

Journal Register newspaper, which featured the project on its front page. The Associated

Press carried the "Decorate an Abe" story.
Television stations in nearby Champaign and Springfield aired interviews with these remarkable high school students.
This expanded publicity led to widespread support and recognition and an increase in donations to the mitigation project.

Enthusiasm for this project and respect

Rippling Recognition

for the students who implemented it has been far-reaching. The International Future Problem Solving organization has recognized the students for their impressive accomplishments. The Illinois Emergency Management Association, the Association of State Floodplain Managers, and FEMA have heralded this project as a model for community-based mitigation. As members of the PORTA High School Community Problem- Solving Team helped to minimize their community's vulnerability to flooding, they also promoted community pride, individual responsibility, and civic involvement. These incredible young men and women helped make their community safer, stronger, and more sustainable.

Christy Brown is a Community Development Specialist with FIMA's Outreach and Partnership Branch and Mary Mies is the PORTA High School Community Problem-Solving Team Sponsor and Coach.

New Tools for Agents

Ant to give your clients something fresh to introduce them to flood insurance? Check out the NFIP's new consumer flyer. Developed to remind homeowners about the need for flood insurance—no matter what zone they live in—the flyer lists some of the most important, and most misunderstood, facts about flood insurance and the NFIP.

Fact. Floods are the #1 natural hazard.

Fact. Homeowners insurance doesn't cover flood damage.

Fact. You can get flood insurance in high- and low-risk flood areas.

Fact. Flood insurance is affordable.

Homeowners are urged to contact the NFIP for a free copy of the *National Flood Insurance Guide* (see page 38).

FIMA has produced a second flyer to inform insurance agents who are new to the NFIP about several flood insurance facts most commonly misunderstood by insurance professionals.

Similar in look and content to the new consumer flyer, the agent flyer lists the same first three facts but

ends with a different fourth fact particularly

important to insurance agents: the NFIP is ready to deliver advertising support and leads. The flyer details many of the marketing materials and activities that the NFIP has developed to support agents.

To order one or more copies of either new flyer, call toll free 888-724-6921. Request items FL-C5-0502 (consumer flyer) and FL-C5-0402 (agent flyer). \boxed{W}

Changes to Disaster Assistance

The National Flood Insurance Reform Act (NFIRA) requirement to purchase flood insurance now applies to those seeking FEMA's Housing Assistance. The NFIRA requirement relate only to NFIP-insurable items within several types of funding from FEMA's Individuals and Households Program (IHP): repair, replacement, or personal property assistance and permanent housing construction.

Applicants who are determined eligible for IHP assistance will be required to buy flood insurance when all the following criteria are met:

- I. The damaged residence is located in an SFHA.
- 2. The declaration includes "flood" as a cause of damage.
- 3. The FEMA inspector indicates "flood" as a cause of damage to a real or personal property line item.
- 4. The real or personal property is (or was at the time of disaster) located at the site of the damage.
- 5. The applicant received financial assistance for the real or personal property.

To receive IHP assistance in future disasters for NFIP-insurable items, applicants who meet the NFIRA requirement criteria must buy flood insurance (building, contents,

or both) equal to or greater than the total assistance received for NFIP-insurable real and personal property. In addition, future IHP assistance will be available only to those who maintain their flood insurance for the following terms.

If the applicant is a homeowner, coverage must be maintained at the address of the damaged property for as long as the address exists. The flood insurance requirement is reassigned to any subsequent owner of the flood-damaged address. If the applicant is a renter, coverage must be maintained on the contents for as long as the renter resides at the damaged rental unit. The restriction is lifted once the renter moves from the rental unit. When financial assistance is used to purchase a housing unit, flood insurance coverage must be maintained on the unit for as long as the unit exists and is located in a designated SFHA. The insurance requirement is reassigned to any subsequent owner of the unit.

For more information about FEMA's disaster assistance programs, visit the Response and Recovery section of FEMA's web site (www.fema.gov/rrr/) or contact the nearest FEMA Regional Office (see telephone numbers listed on the tear-off flap on the back cover). W

Claims Adjuster Presentations

Claims adjusters who wish to be certified by the NFIP must attend one of the NFIP Claims Presentations offered between January and June each year. The dates and locations of these presentations in 2003 are listed below:

2003 Workshop Locations and Dates

STATE	CITY	DATE
Maryland	Lanham	February 5
California	San Diego	February 19
California	Vallejo	February 21
Oregon	Salem	February 24
Washington	DuPont	February 26
Texas	Arlington	March 4
Texas	Arlington	March 5
Texas	San Antonio	March 7
Texas	Houston	March 10
Louisiana	New Orleans	March 12
Louisiana	New Orleans	March 13
Florida	Pensacola	March 24
Florida	Tampa	March 26
Florida	Miami	March 28
Puerto Rico	San Juan	March 31
North Dakota	Fargo	April 4
Tennessee	Memphis	April 7
Missouri	St. Louis	April 9
Illinois	So. Barrington (Chicago area)	April II
New Jersey	Branchville	April 28
New York	Ronkonkoma	April 30
Rhode Island	Providence	May 2
North Carolina	Wilmington	May 14
South Carolina	Cayce (Columbia area)	May 16
Virginia	Norfolk	May 19

For more information, visit the NFIP web site (www.fema.gov/nfip/ca1.htm), or if you have additional questions, call the Claims Presentation Coordinator at 301-731-5300 ext. 746 or TDD at 301-918-1409.

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Rating with "Replacement Cost"

There are times when an agent is faced with the dilemma of trying to interpret underwriting guidelines strictly and, at the same time, provide the client with the best possible premium quote. An example of this predicament comes into play when quoting elevated, 1981 Post-FIRM, V-Zone buildings.

On October 1, 1981, the NFIP implemented a revised rating system for new or substantially improved buildings constructed in coastal high-hazard areas of Regular Program communities (identified on FIRMs as V Zones). This rating system applies to:

- I. Zones VE and VI-V30 buildings in special flood hazard for which the building permit application was dated on or after October I, 1981; and
- 2. VE and VI-V30 Zone buildings for which the building permit was issued before October I, 1981, but whose construction (a) did not begin within 180 days of the permit date and (b) began on or after October I, 1981.

To determine the correct insurance rate for Post '81 V- Zone construction, the agent must establish the building's insurance to replacement cost ratio.

In the rate tables located on pages RATE 7-8 of the Flood Insurance Manual, building rates are presented in

three columns according to replacement cost ratio. The agent must determine whether the building is being insured to at least 75 percent, 50 percent to 74 percent, or less than 50 percent of its replacement cost. The rate tables show that the lower the ratio, the higher the premium will be. Normally, this wouldn't be a problem. After all, it is to your client's benefit to insure the building to its replacement cost; insuring to value is a sound underwriting principle. However, the problem arises when insuring to value is not an option for the client.

For example, a single-family dwelling cannot be insured for more than the NFIP statutory limit of \$250,000. If the replacement cost of the home is \$350,000, the NFIP's replacement cost ratio would be .71—requiring use of a higher rate than if the building met the .75 or more ratio. Because the insured is purchasing the most coverage allowed by law, it might seem more reasonable to calculate the premium using \$250,000 as the building's replacement cost. Herein lies the confusion. Should the agent use \$350,000 or \$250,000 to calculate the ratio? The answer is \$350,000: because the NFIP has based the '81 Post-FIRM V-Zone rates on the replacement cost of the building, the statutory limit should not even come into play when determining the replacement cost ratio.

How to Determine the Replacement Cost Ratio and Rate

The replacement cost ratio is determined by dividing the amount of building coverage by the replacement cost of the building.

Amount of coverage purchased

= Replacement cost ratio

Replacement cost of the building

Once you've calculated the ratio, refer to the 3 columns on either page RATE 7 or 8 of the NFIP Flood Insurance Manual to determine the rate.

For example:

- I. A building insured to \$250,000 (but valued at \$1,000,000) has a replacement ratio of .25 (\$250,000 divided by \$1,000,000 equals .25). Determine the rate for this building from the "Replacement Cost Ratio Under .50" column of the appropriate table.
- 2. A building insured to \$200,000 (but valued at \$350,000) has a replacement ratio of .57 (\$200,000 divided by \$350,000 equals .57). Determine the rate for this building from the "Replacement Cost Ratio .50 to .74" column of the appropriate table.
- 3. A building insured to \$135,000 (but valued at \$150,000) has a replacement ratio of .90 (\$135,000 divided by \$150,000 equals .90). Determine the rate for this building from the "Replacement Cost Ratio .75 or More" column of the appropriate table.

FEMA Tutorials Go Online

John Magnotti, FIMA

ne of the major goals of FEMA's strategic plan is to "Serve as the nation's portal for emergency management information and expertise." To help accomplish this, several multimedia tutorials have been developed to provide in-depth training in different facets of the NFIP and to support the public education and outreach efforts of FEMA's Map Modernization effort.

The tutorials that are complete are available from the Online Tutorial main page of the Flood Hazard Mapping section of the FEMA web site (www.fema.gov/mit/tsd/ot_main.htm).

Easy Access

FEMA's tutorials provide information and self-paced training, and most allow the user to print out a certificate of completion after a successful review of all the material. More than 2000 certificates had been generated as of Fall 2002. Our tutorials are frequently referenced over and over. The number of tutorials that are accessed each year averages around 20,000. The tutorials currently available include the following:

Coastal Theory and Mapping

Coastal_tutorial featuring the Coastal Hazard Analysis Modeling Program (CHAMP).

Geographic Information System (GIS) and Advanced Mapping Technology

This tutorial includes: Introduction to GIS; Using GIS to Create Digital Flood Insurance Rate Maps (DFIRMs); and Using GIS, DFIRM, and Other Data for Sample Community Applications.

How to Read a Flood Insurance Rate
Map

This tutorial is the one most accessed by our visitors.

How to Read a Flood Insurance Study

How to Use Select FEMA and NFIP-Related Mapping Support Software

Support software includes: QUICK-2, Version 2.0; CHECK-RAS, Version 1.1; and RASPLOT, Version 2.1.0.

How to Use the Mapping Needs
Update Support System (MNUSS)

This includes one tutorial each for Users and Controllers.

How to Use the Monitoring Information on Contracted Studies (MICS) System

Future Tutorials

Two other tutorials are in development and will be available from the Online Tutorial main page (www.fema.gov/mit/tsd/ot_main.htm) in the near future. These tutorials will provide guidance and self-paced learning concerning:

How to Use the U.S. Geological Survey National Flood Frequency (NFF) Software; and

NFIP Revision and Amendment Processes,

Tutorials will address Letter of Map Amendment, Letter of Map Revision - Based on Fill, and Letter of Map Revision.

Keeping Up to Date

Site visitors can also subscribe to receive technical bulletins that are associated with the CHECK-RAS, Coastal featuring CHAMP, NFF, QUICK-2, and RASPLOT tutorials. Subscription forms for each bulletin are available online (www.fema.gov/mit/tsd/ot_main.htm).

Bulletins will be produced and distributed to subscribers on an asneeded basis to publicize significant events and to disseminate important information related to each mailing list. Past issues are archived and can be easily retrieved via a web link on the tutorial pages.

Online tutorials and associated technical bulletin subscriptions are a great way to learn more about FEMA software, programs, and processes that are related to the NFIP and Flood Hazard Mapping issues. Visit FEMA's Online Tutorial main page (www.fema.gov/mit/tsd/ot_main.htm) to access the tutorials, to sign up for technical bulletins of interest, and to get additional information about these resources.

John Magnotti, is in FIMA's Hazard Mapping Division, and has worked at FEMA for 10 years. For the last 4 years he has focused primarily on developing and mapping the Flood Hazard Mapping web site and the map Assistance Center.

ReSources

Watermark seeks to serve its readers with as wide a variety of resources as possible. We remain dedicated to disseminating information about flood insurance. As our readership expands to include more engineers, surveyors, and community planners, we hope to increase the available resources to ensure that all of our stakeholders can provide themselves, their clients, and their community members with the tools needed to better protect against flood losses.

We offer this information for reference but do not endorse any product, company, or service. Web site addresses may have changed since to publication of this edition.

Publications

National Flood Insurance Guide

This new consumer document from FEMA explains how the NFIP works. The three-part booklet provides basic infor-

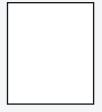


mation about flood risks, building and contents coverage, tips for protecting homes and belongings, and activities that individuals, organizations, and governments can undertake to build communities that are better prepared for flooding. It includes a brief description of the mandatory purchase of flood insurance requirement as well as short descriptions of other FEMA

programs and activities that provide mitigation and planning assistance in reducing flood losses. The booklet is available by calling 888-724-6020 (request publication F-550). It is also available online (www.fema.gov/doc/library/nfipdescrip.doc).

Rising Waters, Mounting Challenge—Flood Prevention, Protection, and Assistance: A Legislator's Guide to Flood Insurance.

Produced by the National Conference of Insurance Legislators, this book describes how the NFIP responds to flood risks and provides State lawmakers with numerous resources and examples of how to strengthen flood prevention and recovery in their States. Individual copies are avail-



able by contacting Susan Bernstein in the Insurance Marketing and Communications Branch of FIMA at 202-646-4350.

The HMGP Guidebook

Fax: 787-725-4244

A wealth of information about the Hazard Mitigation Grant Program has been compiled in this document by FEMA Region II. To order copies, contact:

Rafael Guzmán, Executive Director, PRSEMA P.O. Box 9066597 San Juan, PR 00906-6597 Phone: 787-724-0124 Getting Started: Building Support for Mitigation Planning FIMA has published a wide range of documents in its

FIMA has published a wide range of documents in its "How To Series" about protecting property from disasters. This mitigation planning guide is a new addition to the series. It is available by calling 888-724-6020 and asking for item FEMA 386-1, or, if you prefer to receive the document on CD, ask for FEMA 386-1CD).

Integrating Human-Caused Hazards into Mitigation Planning

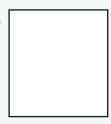
Another new mitigation planning guide in FIMA's "How To" series, this publication is available by calling 888-724-6020 and asking for FEMA 386-7, or if you prefer to receive the document on CD, ask for FEMA 386-7CD.

CDs

Using GIS to Demonstrate Successful Floodplain Management.

This FEMA-produced CD contains information about how communities can use geographic information systems (GIS) as

a planning and marketing tool to promote hazard mitigation. The CD includes a section on the Innovative Floodplain Management Case Study for Kinston-Lenoir County, North Carolina; a PowerPoint® presentation; and several GIS maps powered by ArcReader™, which allows users to create maps that display



combinations of spatial data such as mapped floodplains, flood damage, evacuation routes, and property acquisitions. The CD, which also includes a list of Internet resources, is available through the FEMA Distribution Center at 800-480-2520, or by fax at 301-362-5335. Request this item by its title.

Web Sites

www.fema.gov/rrr/prep.shtm

FEMA's Response and Recovery web site discusses a broad range of natural and man-made disasters—from dam safety to winter storms—and offers information about protecting your family and your home. Most risks are examined in a before, during, and after format.

www.floodmaps.fema.gov/listserv/archive.htm

At this site, bulletins are available from FEMA's Flood Hazard Mapping archives in the areas of national flood frequency, flood hazard mapping, coastal hazard mapping, QUICK-2, CHECK-RAS, and RASPLOT. W

TUST AROUND THE BEND

Many more workshops will have been added to our schedule since publication of this issue. Please contact the NFIP Bureau and Statistical Agent Regional Offices (listed on the detachable telephone sheet to the right) for specific information about NFIP events for agents, lenders, and other stakeholders.

STATE/EVENT	CITY	DATE
CALIFORNIA Agent and Lender Seminar AAI Annual Conference National Flood Conference Agent and Lender Seminar	Orangevale San Diego San Francisco Salinas Santa Cruz Orange San Diego Oceanside Long Beach Santa Rosa Napa	March 26 April 27-29 May 27-30 June 25 June 26 July 23 July 24 August 5 August 6 September 17 September 25
FLORIDA Lender Seminar PLRB Annual Conference Governor's Hurricane Conference	West Palm Beach Orlando Tampa	March 12 March 30-April 2 June 9-13
IDAHO Agent Workshop Lender Seminar Agent and Lender Seminar Agent and Lender Seminar	Boise Boise Pocatello Twin Falls	April I April 2 April 3 April 4
INDIANA Agent Workshop Agent Workshop Agent Workshop	Indianapolis Fort Wayne Merrillville	April 15 April 16 April 17
ILLINOIS RIMS Annual Conference SITE Annual Meeting	Chicago Chicago	April 6-10 June 28-July 1
IOWA Agent and Lender Seminar	Independence McGregor Davenport Council Bluffs Sioux City Des Moines	April I April 2 April 3 August 26 August 27 August 28
KANSAS Agent and Lender Seminar	Overland Park Topeka Atchison Independence Arkansas City Wichita Great Bend Dodge City Colby	March 25 March 26 March 27 June 17 June 18 June 19 July 8 July 9 July 10
LOUISIANA Agent Workshop Lender Seminar Agent Workshop National Hurricane Conference NASFA National Convention	West Monroe Bossier City Bossier City New Orleans New Orleans	April I April 2 April 3 April 14-19 June 16-22
MARYLAND Agent Workshop Lender Seminar Agent Workshop Lender Seminar	Lanham Lanham Lanham Lanham	March 25 March 26 September 23 September 24
MISSOURI Lender Seminar STATE/EVENT	St. Louis CITY	April 16 DATE

Agent and Lender Seminar ASFPM Annual Conference	Rockaway Beach St. Louis	April 17 May 11-16
NEBRASKA Agent and Lender Seminar	South Sioux City Omaha Lincoln Kearney Ogallala Scottsbluff	July 29 July 30 July 31 August 5 August 6 August 7
NEVADA Agent and Lender Seminar NAIIA Annual Conference Agent and Lender Seminar	Reno Las Vegas Las Vegas	April 3 May 21-24 June 3
NEW MEXICO Agent and Lender Seminar	Albuquerque	April 15
NEW YORK NAIC Summer National Meeting	New York City	June 21-25
OHIO Agent Workshop Agent Workshop	Richfield Norwood	March 18 May 22
OREGON Agent and Lender Seminar Agent Workshop Lender Seminar Agent Workshop Lender Seminar Agent Workshop Lender Seminar Agent Workshop	Salem Portland Portland Newport Newport Bend Bend Klammath Falls	April 16 April 17 April 18 June 26 June 27 July 15 July 16 July 17
PENNSYLVANIA Agent Workshop	Philadelphia	June 6
TEXAS Agent and Lender Seminar Agent and Lender Seminar Agent and Lender Seminar	Tyler Austin Bryan	April 3 April 8 April 10
VIRGINIA Agent and Lender Seminar NCOIL Summer Meeting	Staunton Williamsburg	April 9 July 10-13
WASHINGTON Agent Workshop	Everett	May 8

Acronyms used in JUST AROUND THE BEND:			
AAI	Alliance of American Insurers		
ASFPM	Association of State Floodplain Managers		
NAIC	National Association of Insurance Commissioners		
NAIIA	National Association of Independent Insurance Adjusters		
NASFMA	National Association of Flood and Stormwater Management Agencies		
NCOIL	National Conference of Insurance Legislators		
PLRB	Property Loss Research Bureau		
RIMS	Risk and Insurance Management Society		
SITE	Society of Insurance Trainers and Educators		

NFIP TELEPHONE NUMBERS

NUMBER	SERVICE
800-638-6620	DIRECT BUSINESS
800-720-1093	AGENT INFORMATION
800-427-4661	GENERAL INFORMATION
800-611-6125	LENDER INFORMATION
800-427-5593	TDD
877-336-2627	FEMA MAP ASSISTANCE CENTER (INFORMATION ABOUT FLOOD HAZARD MAPS AND MAP CHANGES)
800-358-9616	FEMA MAP SERVICE CENTER (ORDER FLOOD MAPS AND FIS STUDIES, FLOOD INSURANCE MANUAL AND, COMMUNITY STATUS BOOK)
800-480-2520 301-497-6378 FAX	FEMA DISTRIBUTION CENTER (ORDER FREE NFIP FORMS AND PUBLIC AWARENESS MATERIALS)

WWW.FEMA.GOV/NFIP

REGIONAL OFFICE **TELEPHONE NUMBERS**

REGION	FEMA	NFIP BUREAU AND STATISTICAL AGENT
REGION I CT, MA, ME, NH, RI, VT	617-223-9540	781-848-1908
REGION II	212-680-3600	732-603-3875
NJ, NY CARIBBEAN OFFICE-PR,VI	787-296-3500 ¹	281-829-6880 ²
REGION III DC, DE, MD, PA, VA, WV	215-931-5608	856-489-4003
REGION IV AL, GA, KY, MS, NC, SC, T	770-220-5200 N	770-396-9117
FLORIDA	770-220-5400 ³	813-975-74514
REGION V IL, IN, MI, MN, OH, WI	312-408-5500	630-577-1407
REGION VI AR, LA, NM, OK, TX	940-898-5399	281-829-6880
REGION VII IA, KS, MO, NE	816-283-7061	913-780-4238
REGION VIII CO, MT, ND, SD, UT, WY	303-235-4800	303-275-3475
REGION IX AZ, CA, GUAM, HI, NV	510-627-7100	916-780-7889
REGION X AK, ID, OR, WA	425-487-4600	425-488-5820

¹FEMA contact number for Puerto Rico and the Virgin Islands.

²NFIP B&SA contact number for Puerto Rico and the Virgin Islands.

³FEMA contact number specifically for the Florida office.

⁴NFPIP B&SA contact number specifically for the Florida office.